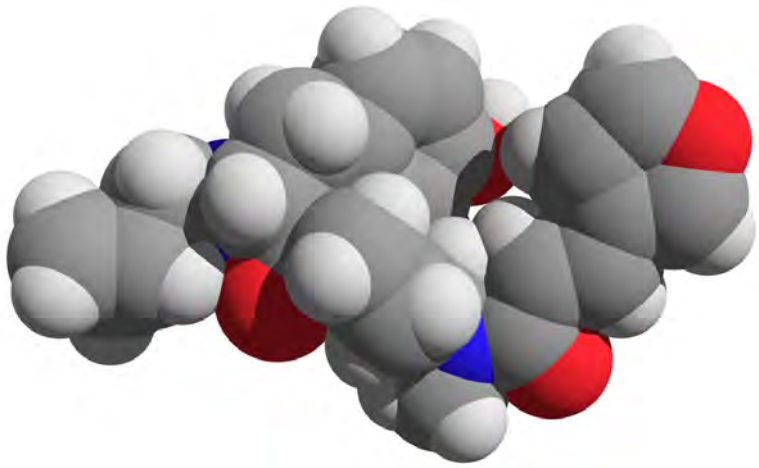
National Institute on Drug Abuse



RESEARCH RESOURCES

DRUG SUPPLY PROGRAM CATALOG

25TH EDITION
MAY 2016

CHEMISTRY AND PHARMACEUTICS BRANCH

DIVISION OF THERAPEUTICS AND MEDICAL CONSEQUENCES

NATIONAL INSTITUTE ON DRUG ABUSE

NATIONAL INSTITUTES OF HEALTH

DEPARTMENT OF HEALTH AND HUMAN SERVICES

6001 EXECUTIVE BOULEVARD

ROCKVILLE, MARYLAND 20852

160524

On the cover: CPK rendering of nalfurafine.

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A. INTRODUCTION

The National Institute on Drug Abuse (NIDA) Drug Supply Program (DSP) is administered by the Chemistry and Pharmaceutics Branch, Division of Therapeutics and Medical Consequences. As part of its mission to lead the nation in bringing the power of science to bear on drug abuse and addiction, NIDA provides researchers with chemicals and research probes that are either unavailable, difficult to obtain, or very expensive to purchase. In addition, this program also provides analytical services of experimental samples used in research.

Drugs and Research Compounds. The NIDA DSP provides a variety of research chemicals and controlled substances for research purposes to all investigators working in the area of drug abuse, addiction, and related disciplines. The availability of controlled substances is regulated by the United States Drug Enforcement Administration (DEA), Department of Justice under the Controlled Substances Act (CSA), and Psychotropic Convention. These substances include hallucinogens, stimulants, sedatives and hypnotics, narcotics, designer drugs, cannabinoids, marijuana, and other miscellaneous categories of drugs. The NIDA DSP maintains an inventory of such drugs and other chemical substances. In addition, continuous efforts are made to synthesize new compounds and add them to the inventory. The stability and purity of all such compounds are monitored and maintained.

Marijuana and Marijuana Cigarettes. Marijuana is grown, harvested, processed and analyzed for delta-9-THC and other cannabinoids, stored under controlled conditions to preserve its purity and stability, and distributed for approved research purposes. This substance is subject to control under Schedule I of the CSA (21 U.S.C. 801 et seq.), the most restrictive of the five federally-regulated classes of controlled substances. Persons who wish to conduct research using marijuana for purposes other than research, such as forensic analytical standards, or any other law enforcement purposes must first obtain a special DEA registration under the CSA and then submit a request to NIDA along with required documents for consideration. It should be noted that priority for supply is given to researchers conducting federally-funded studies.

Nicotine Research Cigarettes. The NIDA DSP also houses a variety of nicotine research cigarettes (NRC) with specific characteristics for nicotine content and yield, tar, menthol, and ventilation (NOT-DA-13-002). As with other research chemicals or controlled substances supplied by the DSP, NRCs can be provided to investigators working in the area of drug abuse, addiction, or related disciplines at no cost. At this time, NRCs are of limited supply and priority is given to federally-funded grantees including

those working on areas related to the tobacco regulatory science authority of the NIDA Drug Supply Program and the United States Food & Drug Administration Center for Tobacco Products (FDA/CTP). A separate administrative review by the FDA/CTP, in collaboration with NIDA, is required for those working on projects within the FDA/CTP priority areas.

In order to obtain controlled substances, other research chemicals, marijuana, or marijuana and nicotine research cigarettes, research investigators are required to submit their requests along with necessary documents to the NIDA DSP for consideration. Applicants (domestic and foreign) without an NIH grant should note that their research protocol will require additional scientific review. Furthermore, research investigators who are not funded by NIH and plan to use marijuana or marijuana cigarettes in human research should be aware that their research protocol is subject to additional review as required by the US Department of Health and Human Services, Public Health Services. If marijuana is to be used for purposes other than human research, the request is forwarded to NIDA's Office of the Director for review and recommendation.

Foreign applicants must provide necessary documentation to demonstrate that they are allowed to import controlled substances, research chemicals, or marijuana cigarettes into their respective countries.

Approved research investigators are provided with pure drugs, compounds, or marijuana cigarettes along with their respective analytical data sheets.

B. NIDA DRUG SUPPLY PROGRAM (DSP) ORDERING GUIDELINES

To obtain research chemicals and controlled substances from the NIDA DSP, research investigators should prepare and submit a Request Package consisting of the following items for consideration:

1. A cover letter including:
    a. Name, phone number and e-mail address of Research Investigator (and consignee, if applicable),
        - Provide a current and complete address that would allow shipment by a suitable carrier such as Federal Express (FedEx) (*i.e.* street address, Building name or number, room number, city and state) - This address should coincide with the address on the DEA order form.
        - For radio-labeled drugs or chemical substances, indicate the address at which the shipment can be made . In case the shipping address is different from the researcher's address, a current copy of the radioactive material license must be submitted.
    b. If applicable, provide the NIH grant number, project title, and name and contact information of NIH Program Officer. If a non-grantee, no information on program Officer and grant number is required.
    c. Name and quantity of compounds or other materials being requested, The total radioactivity (preferred unit of measurement, mg per vial, etc.)
        - If multiple studies/tasks are planned, combine projected needs into a single request rather than placing several separate requests in a short time interval. The request should generally be limited to four items or drugs/compounds per request to avoid delay.
        - Avoid drug abbreviations, and include specifications such as (+), (-), (*dl*), base, or salt. You may consult the NIDA DSP Catalog for such information.
2. The Research Investigator’s *curriculum vitae* (if not a funded grantee)
3. A detailed research protocol clearly indicating:
    a. The specific aims and goals of proposed study (preferably the study abstract)
    b. The number of experiments and experimental subjects
    c. The dosage or concentration of drugs

- Calculate required amount of drugs or chemical substances for your project and submit your request well in advance of your planned experiments or tasks, or 6-8 weeks prior to depletion of stock on hand for ongoing studies/ tasks.

d. Justification for quantity of compounds/drugs, or other substances in request requested.
   If the request is related to a previously submitted protocol, provide a reference to this protocol and a brief description of progress along with references to resulting publications, if any.

4. A statement or commitment that NIDA will be acknowledged in research publications resulting from the use of supplies received from the NIDA Drug Supply Program.

5. A completed DEA Order Form-222 for Schedule I-II controlled substances.

   a. DEA Form-222 is not necessary for drugs in Schedules III-V, but a valid registration for the appropriate schedule is required.

   b. Under the third column of DEA Form-222 (Size of Package), list quantities as bulk weight. Radio-labeled compounds must be listed by weight and NOT by units of activity.

6. A copy of current DEA registration, Form DEA-223 for controlled substances.

   a. It is the Research Investigator's responsibility to keep his/her registration current and to verify the drug code for requested drug.

   b. Investigators who request a Schedule I drug and/or Etorphine HCl or Diprenorphine must provide DEA documentation under which the requested drug is covered under their current DEA registration.

   c. Avoid drug abbreviations, and include specifications such as (+), (-), (dl), base, or salt, as appropriate.

7. A copy of a Nuclear Regulatory Commission license for radioactive compounds.
   For more information, you may visit the Nuclear Regulatory Commission licensing website.

8. Research projects involving human subjects (Clinical research)

   a. Investigational New Drug (IND) number and a copy of approved IND letter from the FDA. For more information, please visit the FDA IND Application website.

   b. A copy of your Institutional Review Board (IRB) approval letter

c. A copy of your Data Safety and Monitoring Plan

d. Proof of registration with clinicaltrials.gov (NCT #)

e. A copy of the study consent form(s)

9. For basic (non-human) research projects.
   A copy of the document demonstrating that the research is approved by the Animal Care & Use Committee and that adequate care in conducting animal research will be exercised (if applicable). For more information, please visit the Animal Care & Use Committee Animal Study Proposal website.

10. For ongoing research projects (This includes research previously supported by the NIH prior to request)

    a. Reference information1pertaining the previous protocol / FDA approval to the previous protocol

    b. A brief description of progress (500 words or less)

    c. A list of relevant publications.

11. Billing Information for Shipping (if applicable):

    a. US investigators should provide their FedEx account number to bill shipping charges,

    b. International requests for controlled compounds should provide their United Parcel Service (UPS) Supply Chain Solutions account number to bill shipping charges. For non-controlled compounds the investigator should provide their FedEx account number.

12. Foreign research investigators must submit an Import Permit (preferably in English) issued by an appropriate agency of their government for internationally-controlled drug substances.

    a. The name of the supplier on the import permit must be listed as follows:

       Research Triangle Institute
       Kenneth S. Rehder
       E. Institute Dr., Hermann Bldg.
       Room 106
       Research Triangle Park, NC 27709

    b. The import permit should be accompanied by a signed statement from the investigator to the effect that the drug will be used solely for the purpose of re-

search and will not be re-exported. The import permit must contain a clear address and individual name to which the requested drug is to be delivered (not a post box number). Shipment should be indicated on the import permit as Air Freight to this individual. Specify the appropriate port for customs clearance purposes and provide the name and address of the Customs Clearance Agent, if one is used.

c. Please obtain the longest possible expiration date on import permits.

d. Foreign investigators requesting drugs or other substances that are not very stable should be certain to make advance arrangements that would allow these drugs or other substances to be released to them expeditiously. This is particularly relevant when dealing with radioactive materials with high specific activity (>1.0 Ci/mmol). These compounds are shipped as solutions in ice and will not stay cold for more than 48 hours; they must be retrieved and put in cold storage immediately to prevent decomposition.

e. Foreign investigators should also be aware that compounds are shipped with a listed value for insurance purposes. Since this may cause problems with customs officials, investigators should determine in advance what steps should be taken to avoid these complications. Often an official statement that the compounds are for research only and have no commercial value is sufficient.

Failure to comply with aforesaid guidelines may delay the processing of your request.

ADDITIONAL NOTES:

1. ETORPHINE AND DIPRENORPHINE - Request for either of these two compounds should be made on separate order forms when ordering additional compounds at the same time. Etorphine hydrochloride and diprenorphine (free base or hydrochloride) are Schedule II drugs, however etorphine free base is a Schedule I drug. Therefore, etorphine free base should be ordered using DEA Form-222 as is appropriate for all Schedule I drugs.
2. CARFENTANIL, ETORPHINE AND DIPRENORPHINE – The DEA registration of a research investigator requesting these compounds must show the proper registration for such compounds.
3. For more information on the Drug Enforcement Administration registration forms including Form 222 and Form 223, please see: http://www.deadiversion.usdoj.gov/drugreg/index.html.

4. For more information about the FDA Investigational New Drug Application, please see: http://www.fda.gov/Drugs/DevelopmentApprovalProcess/HowDrugsareDevelopedandApproved/ApprovalApplications/InvestigationalNewDrugINDApplication/default.htm.
5. For more information on the Nuclear Regulatory Commission License, please see: http://www.nrc.gov/about-nrc/regulatory/licensing.html. Foreign applicants are required to submit additional documentation, including an import permit from the country into which the drug(s) are being shipped.

CONTACT INFORMATION:

All requests or questions should be addressed to:

Richard Kline, Ph.D.
phone: (301) 827-5243
email: rkline@nida.nih.gov

Robert Walsh
Phone: (301) 443-9825
email: bob.walsh@nih.gov

Kevin Gormley
Drug Supply Specialist
phone: (301) 435-0264
email: kgormley@nida.nih.gov

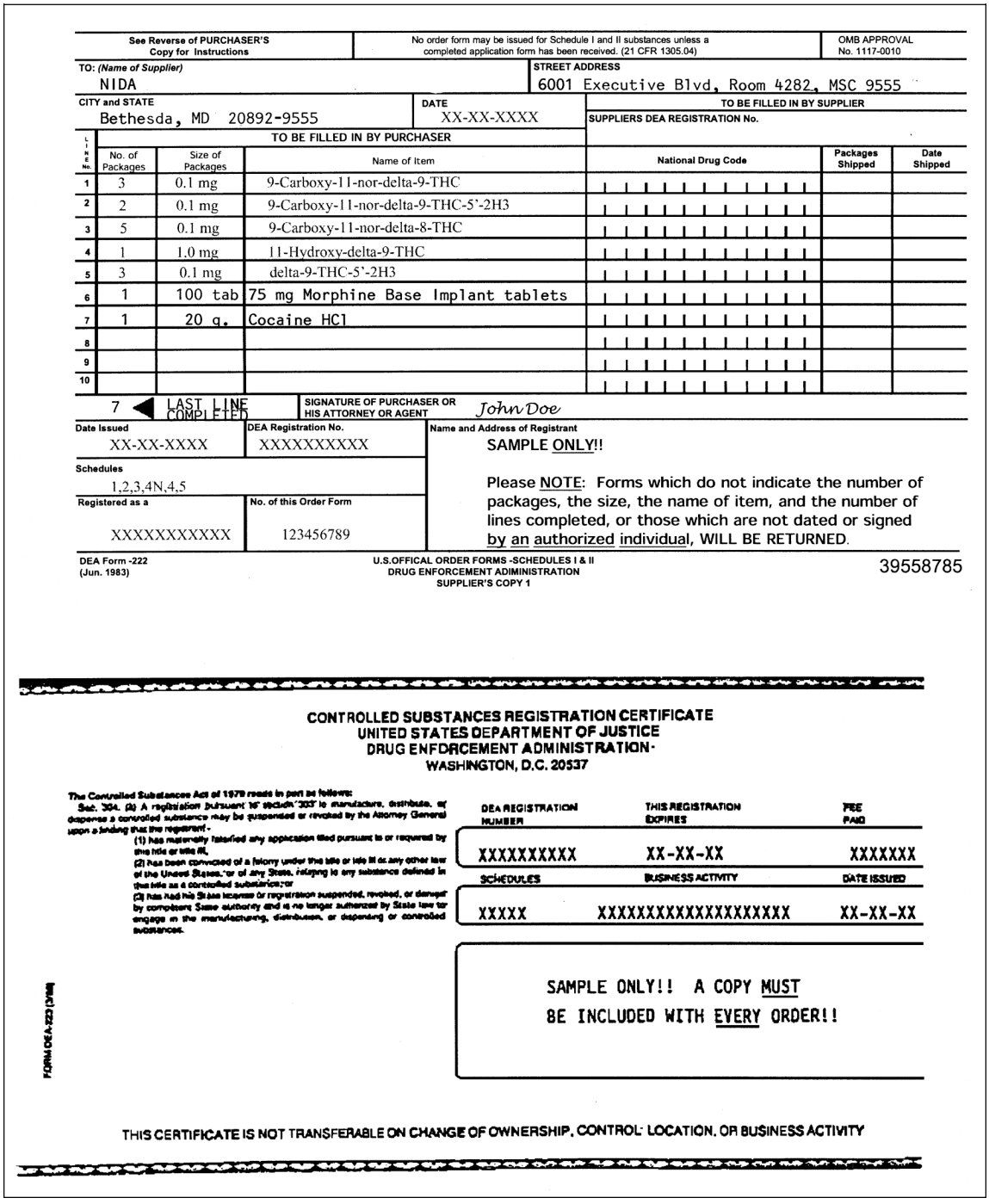
Division of Therapeutics and Medical Consequences (DTMC)
Chemistry and Pharmaceutics Branch (CPB)
National Institute on Drug Abuse, NIH
6001 Executive Boulevard, Room 4119
Rockville, MD 20852
Fax: (301) 443-2599
Phone: (301) 827-5243

C. Drug Request Checklist

1. A ***cover letter*** including the name and quantities of compounds or drugs being requested, grant number, and name, phone number and e-mail address of your program officer (for an NIH/NIDA grantee), your shipping address, e-mail address, phone and fax numbers.
2. A ***recommendation letter*** from your program officer in support of your request.
3. A ***research protocol***, including justification for the requested quantity of compounds or drugs being requested.
4. A ***DEA Form 222*** (for controlled substances).
5. A copy of your current ***DEA registration*** (for controlled substances).
6. An ***approved FDA letter*** and ***IND number*** (for a clinical study).
7. A copy of an ***NRC license*** for radioactive compounds.
8. A ***curriculum vitae*** of the principal investigator, if applicable.
9. A ***statement of commitment*** that NIDA will be acknowledged in publications.

D. SAMPLE DEA ORDER FORM 222

(THIS IS A SAMPLE OF A CORRECTLY COMPLETED DEA 222 FORM. PLEASE NOTE THAT ALL ENTRIES SHOULD BE IN THE APPROPRIATE COLUMNS.)



See Reverse of PURCHASER'S Copy for Instructions

No order form may be issued for Schedule I and II substances unless a completed application form has been received. (21 CFR 1305.04)

OMB APPROVAL No. 1117-0010

TO: *(Name of Supplier)*
NIDA

STREET ADDRESS
6001 Executive Blvd, Room 4282, MSC 9555

CITY and STATE
Bethesda, MD 20892-9555

DATE
XX-XX-XXXX

TO BE FILLED IN BY SUPPLIER
SUPPLIERS DEA REGISTRATION No.

TO BE FILLED IN BY PURCHASER

LINE No.	No. of Packages	Size of Packages	Name of Item	National Drug Code	Packages Shipped	Date Shipped
1	3	0.1 mg	9-Carboxy-11-nor-delta-9-THC			
2	2	0.1 mg	9-Carboxy-11-nor-delta-9-THC-5'-2H3			
3	5	0.1 mg	9-Carboxy-11-nor-delta-8-THC			
4	1	1.0 mg	11-Hydroxy-delta-9-THC			
5	3	0.1 mg	delta-9-THC-5'-2H3			
6	1	100 tab	75 mg Morphine Base Implant tablets			
7	1	20 g.	Cocaine HCl			
8						
9						
10						

7 ◀ LAST LINE COMPLETED

SIGNATURE OF PURCHASER OR HIS ATTORNEY OR AGENT *John Doe*

Date Issued
XX-XX-XXXX

DEA Registration No.
XXXXXXXXXX

Name and Address of Registrant
SAMPLE ONLY!!

Please NOTE: Forms which do not indicate the number of packages, the size, the name of item, and the number of lines completed, or those which are not dated or signed by an authorized individual, WILL BE RETURNED.

Schedules
1,2,3,4N,4,5

Registered as a
XXXXXXXXXXX

No. of this Order Form
123456789

DEA Form -222 (Jun. 1983)

U.S.OFFICAL ORDER FORMS -SCHEDULES I & II
DRUG ENFORCEMENT ADIMINISTRATION
SUPPLIER'S COPY 1

39558785

CONTROLLED SUBSTANCES REGISTRATION CERTIFICATE
UNITED STATES DEPARTMENT OF JUSTICE
DRUG ENFORCEMENT ADMINISTRATION
WASHINGTON, D.C. 20537

The Controlled Substances Act of 1978 reads in part as follows:

Sec. 304. (a) A registration pursuant to section 303 to manufacture, distribute, or dispense a controlled substance may be suspended or revoked by the Attorney General upon a finding that the registrant -

(1) has materially falsified any application filed pursuant to or required by this title or title III,

(2) has been convicted of a felony under this title or title III or any other law of the United States, or of any State, relating to any substance defined in this title as a controlled substance; or

(3) has had his State license or registration suspended, revoked, or denied by competent State authority and is no longer authorized by State law to engage in the manufacturing, distribution, or dispensing of controlled substances.

DEA REGISTRATION NUMBER	THIS REGISTRATION EXPIRES	FEE PAID
XXXXXXXXXX	XX-XX-XX	XXXXXXX
SCHEDULES	**BUSINESS ACTIVITY**	**DATE ISSUED**
XXXXX	XXXXXXXXXXXXXXXXXXX	XX-XX-XX

SAMPLE ONLY!! A COPY MUST BE INCLUDED WITH EVERY ORDER!!

FORM DEA-223 (3/88)

THIS CERTIFICATE IS NOT TRANSFERABLE ON CHANGE OF OWNERSHIP, CONTROL, LOCATION, OR BUSINESS ACTIVITY

E. Supply and Analysis of Standard Solutions of Δ^9-THC

In discussions with investigators working in the area of quantitative analysis of Δ^9-THC, the question on the availability of its standard has repeatedly arisen. Because of the difficulties associated with accurately weighing exact quantity of non-crystalline Δ^9-THC, NIDA provided the following Δ^9-THC and its standard in solution form upon special request to research investigators in past and it still continues to do so:

1. 1. Small quantity of two stock solutions of Δ^9-THC, 5 mg/ml in ethanol, and 0.5 mg/ml in ethanol, and Δ^9-THC 0.70 mg/ml and androst-4-ene-3,17-dione in ethanol. The latter material is an internal standard for GC analysis. This steroid can also be provided in solid form to researchers who want to perform their own GC analyses. Note that both of these stock solutions are analyzed for exact composition and analytical data are provided with the shipment
2. As a final check, NIDA can provide the analysis of your stock solution using standardized procedure. At least 1.0 mL of stock solution should be provided with approximate concentration. If the concentration is greater than 50 µg/mL Δ^9-THC, a standard GLC or HPLC analysis is performed using a steroid internal standard. For concentrations lower than this, GC/MS technique is used.

For further information, contact:

Richard Kline, Ph.D.
Phone: (301) 827-5243
email:
rkline@nida.nih.gov

Robert Walsh
Phone: (301) 443-9825
email:
bob.walsh@nih.gov

Kevin Gormley (RTI)
Phone: (301) 435-0264
email:
kgormley@nida.nih.gov

Division of Therapeutics and Medical Consequences (DTMC)
Chemistry and Pharmaceutics Branch (CPB)
National Institute on Drug Abuse, NIH
6001 Executive Boulevard, Room 4119
Rockville, MD 20852

F. Alternative Sources for Peptides

Recognizing a need in the research community for peptides, NIDA has included many peptides in the list of compounds provided to researchers through the NIDA Drug Supply Program. There are, however, a number of commercial suppliers that have many compounds of interest which are currently unavailable from the NIDA program. The addresses and phone numbers of some of these suppliers are:

PolyPeptide Laboratories San Diego
9395 Cabot Drive
San Diego, CA 82126
(800) 338-4965

Pierce Biotechnology
P.O. Box 117
Rockford, IL 61105
(800) 874-3723

Bachem Americas, Inc.
3132 Kashiwa Street
Torrance, CA 90505
(888) 422-2436

Sigma Chemical Co.
P.O. Box 14508
St. Louis, MO 63178
(800) 325-3010

NIDA is always receptive to suggestions for new peptides that are of interest to the scientific community. These suggestions should be in writing accompanied by the structure of the peptide as well as any names by which it is known. These suggestions should be forwarded to:

Richard Kline, Ph.D.
Division of Therapeutics and Medical Consequences (DTMC)
Chemistry and Pharmaceutics Branch (CPB)
National Institute on Drug Abuse, NIH
6001 Executive Boulevard, Room 4119
Rockville, MD 20852
email: rkline@nida.nih.gov
Fax: (301) 443-2599
Phone: (301) 827-5243

G. Instructions for Analytical Services

NIDA facilitates drug abuse research by providing analytical services to research investigators who do not have necessary analytical facilities in their own laboratories. Priority is given to those investigators who are funded by NIDA.

Experimental samples (such as tissue, plasma, urine, and saliva) are analyzed in a NIDA contract laboratory for determining the concentration of drugs of abuse and their metabolites or precursors. The result of analyses is sent to research investigator with a copy to NIDA program official.

Request for analytical services should be submitted to the NIDA Drug Supply Program official with the following information for consideration and approval:

1. Number and title of your funded NIDA research grant
2. Name and contact information of your program official
3. In case of no grant, a brief research protocol
4. Number and name of drug(s) or drug metabolite(s) for analysis
5. Nature and origin of matrix such as rat/mouse/or human serum, plasma, urine, tissue, or saliva
6. Minimum expected concentrations of each drug/metabolites, and
7. Any other information that could be useful for analysis
8. A commitment to acknowledge NIDA in research publications resulting from this service. Once a research paper is published, a reprint or reference must be provided to NIDA drug supply program official.

After request approval, researcher will be contacted to submit experimental samples with shipping instructions to the following NIDA contract laboratory:

David E. Moody, Ph.D.
Center for Human Toxicology
University of Utah
30 South 2000 East
(for regular mail) Room 105
(for courier) Room 3956
Salt Lake City, UT 84112
Phone: (801) 581-5117; Fax: (801) 581-5034
E-Mail:david.Moody@utah.edu

NOTE: It is recommended that the research investigator obtain authorization prior to conducting any experiments so they can consult with the analytical laboratory about sample preparation and appropriate analyses.

Request for analysis should be submitted to:

Richard Kline, Ph.D.
Division of Therapeutics and Medical Consequences (DTMC)
Chemistry and Pharmaceutics Branch (CPB)
National Institute on Drug Abuse, NIH
6001 Executive Boulevard, Room 4119
Rockville, MD 20852
email: rkline@nida.nih.gov
Fax: (301) 443-2599
Phone: (301) 827-5243

H. X-Ray Diffraction Analysis of Compounds

The purpose of this service is to provide definitive three-dimensional structural coordinates of compounds in support of drug abuse research. X-Ray diffraction analysis is performed on two types of compounds. The first type consists of non-peptide drugs, their analogs, related probes or potential analytical therapeutics including substances related to cocaine, phencyclidine, cannabinoids, opiates, and others. The second type consists of opioids and related peptides (CCK related, FMRF related, and alpha MSH-related fragments, etc.).

X-ray diffraction results provide full characterization of a compound even when the empirical formula of the molecule is not known beforehand. It is only the analytical method that can clearly define the absolute configuration of a molecule. An X-ray diffraction experiment requires only one good single crystal ideally about 0.1 x 0.2 x 0.2 mm (~0.1 mg of starting material). Note that single crystals may contain solvent so the best results are often obtained when samples are shipped in their mother liquor. If the submitted sample does not contain suitable single crystals then a minimum of 10 mg of sample is required for crystallization experiments. For these non-crystalline compounds information about stability and solubility should be provided with the sample. In present day research environment growing good single crystal is often the slowest step in the process since the use of high speed computers and state of the art data collection systems have reduced the time needed to complete a single structure study from several weeks to a few days.

For all samples indicate: 1 – if absolute of relative conformation is required as part of the analysis; 2 – the chirality of any known centers; 3 – provide a diagram of the expected structure including a preferred numbering scheme if applicable.

To request X-ray diffraction analysis of compounds, research investigators should provide the following information for consideration:

Request for X-Ray Diffraction Analysis

Name of Investigator: _____

Institution: _____

Mailing Address: _____

E-Mail Address: _____

Phone & Fax Numbers: _____

NIH/NIDA Grant Title: _____

NIH/NIDA Grant Number: _____

Name of Your Program Officer (NIH/NIDA): _____

Type of compound: _____

Empirical Formula: _____

Anticipated Structure/comments/suggestions:

_____

_____

Signature of Principal Investigator: _____

Provide a recommendation letter from your Program Officer in support of your request. If not a NIDA grantee, provide a research protocol of your study for review signifying the relevance of your study with the NIDA research programs. The priority will be given to research investigators who are funded by the NIDA. A commitment to recognize NIDA must be provided. Once a paper is published, a copy, reprint, or publication reference must be submitted to NIDA program official.

Note: An incomplete application may not be considered.

The signed request (or electronic version) for analysis should be submitted to the following for approval before submitting your sample to the Center for Crystallo-

graphic Studies, Laboratory for Structure of Matter, Naval Research Laboratory, 4555 Overlook Ave. S.W., Washington, D.C. 20375-5000:

Richard Kline, Ph.D.
Division of Therapeutics and Medical Consequences (DTMC)
Chemistry and Pharmaceutics Branch (CPB)
National Institute on Drug Abuse, NIH
6001 Executive Boulevard, Room 4119
Rockville, MD 20852
email: rkline@nida.nih.gov
Fax: (301) 443-2599
Phone: (301) 827-5243

I. Nicotine Research Cigarettes Drug Supply Program

The NIDA DSP now provides a variety of nicotine research cigarettes (NRC) to research investigators. For more information on the Notice of Availability, please see http://grants.nih.gov/grants/guide/notice-files/NOT-DA-14-004.html.

Nicotine Research Cigarette Drug Supply Program Application Process

To obtain NRCs from the National Institute of Drug Abuse Drug Supply Program, all research investigators will need to prepare a Request Package.

Stepwise Procedure (Basic Non-Human Research)

1. A Request Package for NRC is submitted to the NIDA Drug Supply Program.
2. Once all request package materials are received, the NIDA Drug Supply Program Director reviews request package for completeness.
3. Materials are reviewed by NIH and assigned to a Program Officer.
    - For non-Grantees, the Program Officer refers to an external Scientific Expert Committee for further review.
4. Once reviewed, the Program Officer provides a recommendation to the NIDA Drug Supply Director for approval.
5. Once approved, if there is adequate inventory of nicotine research cigarettes, the NIDA Drug Supply Director issues shipment authorization.

Stepwise Procedure (Clinical Research with Human subjects)

1. A Request Package for NRC is submitted to the NIDA Drug Supply Program.
2. Once all request package materials are received, the NIDA Drug Supply Program Director for consideration.
3. Materials are reviewed by NIH and assigned to a Program Officer
    - For non-Grantees, the Program Officer refers to FDA and the Scientific Expert Committee for further review.
4. Once reviewed, the Program Officer provides a recommendation to the NIDA Drug Supply Director for approval.
5. Once approved, and there is adequate inventory of nicotine research cigarettes, the NIDA Drug Supply Director issues shipment authorization.

FAQs for the Investigational Tobacco Product (ITP) application

For researchers, in order for the Nicotine Research Cigarette (NRC) order to be deemed complete by the NIDA Drug Supply Program (DSP) Director, an Investigational Tobacco Product (ITP) application needs to be completed and forward to the FDA for approval. Below are helpful notes which will further your application to approval status. **Please be consistent and as specific as possible throughout your ITP application.** If not, applications may be considered inappropriate and delayed until corrected.

- Include actual date of previously submitted ITPs for cross-reference.

Reference the actual Tobacco Product Master File (TPMF) code name for the requested nicotine research cigarette (NRC) (e.g., NRC 300, RN).

- As specifically as possible, provide the specific grant number, grant title (where appropriate), project and/or protocol number and title, and PI for the study.
- Please provide the study sponsor. Note the distinction between "sponsor" and "investigator": sponsors are typically considered to be the awarded institution (for NIH grants) to which the funding will be designated. Investigators are the primary research contact who conducts the research at that particular institution.
- Please be sure that the title of SPECTRUM cigarettes should be in all caps and consistent throughout your ITP application.

All inquiries and requests for the Investigational Tobacco Product application should be forwarded to the:

Center for Tobacco Products
Food and Drug Administration
Document Control Center, Room 020J
9200 Corporate Boulevard Rockville, MD 20850
(301) 796-0456

Point of Contact. All other requests or questions should be addressed to:

Richard Kline, Ph.D.
National Institute on Drug Abuse, NIH
6001 Executive Boulevard, Room 4119
Rockville, MD 20852
email: rkline@nida.nih.gov
Fax: (301) 443-2599
Phone: (301) 827-5243

J. Ordering Guidelines for Nicotine Research Cigarettes (NRCs)

To obtain NRCs from the NIDA DSP, all research investigators will need to prepare a NRC Request Package. A Request Package should include the following items:

1. A cover letter including:
   a. Name, phone number and e-mail address of Research Investigator (and consignee, if applicable),
      - Provide a current and complete address that would allow shipment by a suitable carrier such as Federal Express (FedEx) (i.e., street address, building name or number, room number, city and state),
   b. If applicable, NIH grant number of project and name and contact information of project's NIDA/NIH Program Officer. If a non-NIH grantee, no information on Program Officer and grant number is required.
   c. Type and quantity of NRCs being requested,
      - If multiple studies/tasks are planned, combine projected needs into a single order rather than placing several separate requests in a short time interval. The request should generally be limited to four items or drugs/compounds per order to avoid delay.
2. The Research Investigator's curriculum vitae (CV).
3. A detailed research protocol clearly indicating:
   a. The specific aims and goals of proposed study (preferably the study abstract)
   b. Number of experiments and experimental subjects
   c. Number and type of NRCs (NOT-DA-14-004), including respective Tobacco Product Master File (TPMF) codes,
      - Calculate required amount of NRCs for your project and submit your request well in advance of your planned experiments or tasks, or 6-8 weeks prior to depletion of stock on hand for ongoing studies/tasks.
   d. Justification for the quantity needed. If the request is related to a previously submitted protocol, provide a reference to this protocol and a brief statement of progress along with references to resulting publications.
   e. A timeline indicating approximately when and what quantities of NRC shipments are needed over the duration of the protocol.

f. Statement of commitment that NIDA will be acknowledged in research publications using the NIDA-supplied cigarettes.

4. For Clinical Research Projects Involving Human Subjects

a. Investigational Tobacco Product (ITP) application information including: A copy of FDA letter (Advice/Information Request) in response to your ITP application. (NOTE: Suggested guidelines for submitting an Investigational Tobacco Product Application (ITPA) to FDA/CTP are given separately. For more information, please visit here.

b. A copy of your Institutional Review Board (IRB) approval letter

c. A copy of your Data Safety and Monitoring Plan

d. Proof of registration with clinicaltrials.gov (NCT #)

e. A copy of the study consent form(s)

5. For Basic (Non-human) Research Projects

- A copy of the document demonstrating that the research is approved by the Animal Care & Use Committee and that adequate care in conducting animal research will be exercised. For more information, please visit the Animal Care & Use Committee Animal Study Proposal website.

6. For Ongoing Research Projects (This includes research previously supported by the NIH prior to NRC request)

a. Reference information pertaining the previous protocol / FDA approval to the previous protocol (if applicable).

b. A brief statement of progress (500 words or less)

c. A list of any relevant publications.

7. Billing Information for Shipping Costs (if applicable):

a. US investigators should provide their FedEx account number to bill shipping charges,

b. International requests should provide United Parcel Service (UPS) Supply Chain Solutions account number to bill shipping charges or FedEx account number as appropriated for the import of NRCs.

Contact Information:

All requests/questions should be sent to: NIDANRCSupply@mail.nih.gov.

Please specify materials requested in the subject line.

Address correspondence to:

Richard Kline, Ph.D.
Division of Therapeutics and Medical Consequences (DTMC)
Chemistry and Pharmaceutics Branch (CPB)
National Institute on Drug Abuse, NIH
6001 Executive Boulevard, Room 4119
Rockville, MD 20852
email: rkline@nida.nih.gov
Fax: (301) 443-2599
Phone: (301) 827-5243

K. Ordering Guidelines for Marijuana and Marijuana Cigarettes

To obtain marijuana and marijuana cigarettes from the NIDA DSP, all research investigators will need to prepare a Marijuana Cigarette Request Package. A Request Package should include the following items:

1. A cover letter including:
   a. Name, phone number and e-mail address of Research Investigator (and consignee, if applicable),
      - Provide a current and complete address that would allow shipment by a suitable carrier such as Federal Express(FedEx) (i.e. street address, building name or number, room number, city and state) - This address should coincide with the address on the DEA order form.
      - If requestor's address is outside the US, please provide all necessary documentation to verify whether particular compound requested is permitted in his/her country for importation.

   b. If applicable, NIH grant number of project and name and contact information of project's NIDA/NIH Program Officer (if applicable).

      If a non-grantee, no information regarding the Program Officer and grant number is required.

   c. Name(s) and quantity of compounds or other substances being requested,
      - If multiple studies/tasks are planned, combine projected needs into a single order rather than placing several separate requests in a short time interval.

      The request should generally be limited to no more than four items per order to avoid delay.

2. The Research Investigator's curriculum vitae (CV).

3. A detailed research protocol clearly indicating:
   a. The specific aims and goals of proposed study (preferably the study abstract),

   b. The number of experiments and experimental subjects,

   c. The strength or concentration of marijuana or marijuana cigarettes,
      - Calculate required amount of marijuana cigarettes for your project and submit your request well in advance of your planned experiments or tasks, or 6-8 weeks prior to depletion of stock on hand for ongoing studies/tasks.

   d. Justification for the quantity of marijuana or marijuana cigarettes requested.

      If the request is related to a previously submitted protocol, provide a reference to this protocol and a brief statement of progress along with references to resulting publications.

4. Statement of commitment that NIDA will be acknowledged in research publications using the NIDA Drug Supply Program.

5. A completed DEA Order Form-222.

- Under the third column of DEA Form-222 (Size of Package), list quantities as bulk weight.

6. A copy of current DEA registration, Form DEA-223 for a controlled substance.

- It is the Research Investigator's responsibility to keep his/her registration current and verify the drug code for the requested materials.

7. For clinical research projects involving human subjects

1. Investigational New Drug (IND) number and a copy of approved IND letter from the FDA. For more information, please visit the FDA IND Application website.
2. A copy of your Institutional Review Board (IRB) approval letter
3. A copy of your Data Safety and Monitoring Plan
4. Proof of registration with clinicaltrials.gov (NCT #)
5. A copy of the study consent form(s)

8. For basic (non-human) research projects

- A copy of the document demonstrating that the research is approved by the Animal Care & Use Committee and that adequate care in conducting animal research will be exercised (if applicable).

  For more information, please visit the Animal Care & Use Committee Animal Study Proposal website.

9. For ongoing research projects (This includes research previously supported by the NIH prior to request)

a. Reference information pertaining to the previous protocol.
b. A brief statement of progress (500 words or less)
c. A list of any relevant publications.

10. Billing Information for Shipping Costs:

1. US investigators should provide a FedEx account number for shipping charges,
2. International requests for marijuana and marijuana cigarettes should provide their United Parcel Service (UPS) Supply Chain Solutions account number to bill shipping charges.

11. For Foreign Investigators, please submit the Import Permit (preferably in English) issued by an appropriate agency of your government. The name of the supplier on the import permit must be listed as follows:

Research Triangle Institute
Kenneth S. Rehder
E. Institute Dr., Hermann Bldg.
Room 106
Research Triangle Park, NC 27709

- The import permit should be accompanied by a signed statement from the investigator to the effect that the materials will be used solely for the purpose of research and will not be re-exported. The import permit must contain a clear address and individual name to which the requested material is to be delivered (not a post office box number). Shipment should be indicated on the import permit as Air Freight to this individual. Specify the appropriate port for customs clearance purposes and provide the name and address of the Customs Clearance Agent, if one is used.
- Please obtain the longest possible expiration date on import permits.
- Foreign investigators should also be aware that the material is shipped with a listed value (for insurance purposes). Since this can cause problems with customs officials, investigators should determine in advance what steps should be taken to avoid these complications. Often an official statement that the materials are for research only and have no commercial value is sufficient.

Failure to comply with these guidelines may delay the processing of your request.

Contact Information:

Richard Kline, Ph.D.
phone: (301) 827-5243
email: rkline@nida.nih.gov

Robert Walsh
Phone: (301) 443-9825
email: bob.walsh@nih.gov

Kevin Gormley
Drug Supply Specialist
phone: (301) 435-0264
email: kgormley@nida.nih.gov

Division of Therapeutics and Medical Consequences (DTMC)
Chemistry and Pharmaceutics Branch (CPB)
National Institute on Drug Abuse, NIH
6001 Executive Boulevard, Room 4119
Rockville, MD 20852

L. Important Addresses, Telephone & Fax Numbers

National Institute on Drug Abuse

Richard Kline, Ph.D.
Phone: (301) 827-5243
email:
rkline@nida.nih.gov

Robert Walsh
Phone: (301) 443-9825
email:
bob.walsh@nih.gov

Kevin Gormley (RTI)
Phone: (301) 435-0264
email:
kgormley@nida.nih.gov

Division of Therapeutics and Medical Consequences (DTMC)
Chemistry and Pharmaceutics Branch (CPB)
National Institute on Drug Abuse, NIH
6001 Executive Boulevard, Room 4119
Rockville, MD 20852

Drug Enforcement Administration (DEA)

Office of Diversion Control Online: http://www.deadiversion.usdoj.gov/

Drug Enforcement Administration
Office of Diversion Control
8701 Morrissette Drive
Springfield, Virginia 22152
Phone: (800) 882-9539

Food and Drug Administration (FDA)

U.S. Food & Drug Administration
Department of Health & Human Services
10903 New Hampshire Avenue
Silver Spring, Maryland 20993
Phone: (888) 463-6332
Website: http://www.fda.gov

M. Available Drugs, Compounds, & Dosage Forms

Disclaimer: All compound descriptions in this catalog are provided for the purpose of general information only and are not intended to address specific issues or to be a complete or definitive source of such information. Nothing herein is to be considered as a warranty, expressed or otherwise. Users of any the materials provided by NIDA are obligated to understand the proper and safe research applications and to comply with the applicable federal, state, and local laws and regulations. The substances described in this catalog are suitable for basic research only and, unless otherwise indicated, are **not** for human use.

1 – New Compounds

(Compounds added to the NDSP catalog since the 24th edition)

Catalog number	Compound	Page
7023-001	AB-PINACA	37
7031-001	AB-CHMINACA	37
NOCD-142	(+)-PHT dihydrochloride	72
NICT-020	(–)-Nicotine ditartrate	74
9652-071	CNV-NLX	77
9739-001	Remifentanil hydrochloride	78
2270-012	Sodium pentobarbital	141
7535-002	(*R*)-MDPV hydrochloride	150
7535-003	(*S*)-MDPV hydrochloride	150
7545-001	α-PVP hydrochloride	150

NIH
National Institute
on Drug Abuse

Cannabinoids: Allosteric Modulators

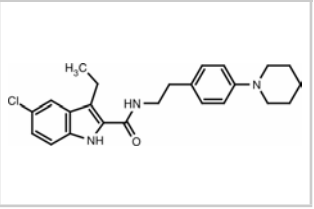
Catalog number : NOCD-133 **CASRN :** 868273-06-7

Name : ORG 27569

Mol. formula : $C_{24}H_{28}ClNO_3$ **FW :** 409.95 **DEA schedule :** 0

Notes : *CB_1 receptor positive allosteric modulator.*

References : Price et al (2005) Allosteric modulation of the Cannabinoid CB1 receptor. Mol.Pharmacol. 68 1484. PMID: 16113085.



Cannabinoids: Cannabichromene Class

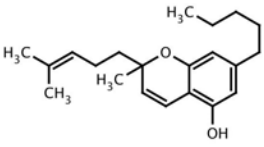
Catalog number : 7360-007 **CASRN :** 20675-51-8

Name : Cannabichromene

Mol. formula : $C_{21}H_{30}O_2$ **FW :** 314.46 **DEA schedule :** 1

Notes : *Non-psychoactive constituent of cannabis.*

References : Turner, CE; Elsohly, MA *J Clin Pharmacol* **1981**, *21*, 283S-291S.



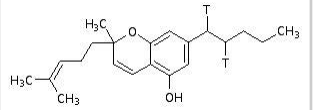
Catalog number : 7360-008 **CASRN :** 20675-51-8 (parent cmpd)

Name : [1',2'-$^3H_2$]Cannabichromene

Mol. formula : $C_{21}H_{30}O_2$ **FW :** 314.46 **DEA schedule :** 1

Notes : *Non-psychoactive constituent of cannabis (tritium-labeled).*

References : *Instrumental Data for Drug Analysis*, 2nd Ed., **1996**, Volume 1, p304.



Cannabinoids: Cannabicyclohexanol Class

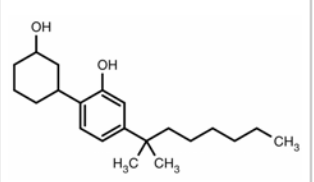
Catalog number : 7927-001 **CASRN :** 114753-51-4

Name : (±)-CP-47497

Mol. formula : $C_{21}H_{34}O_2$ **FW :** 318.50 **DEA schedule :** 1

Notes : *Potent CB_1 receptor agonist.*

References : Melvin, L. S., *et al., J Med Chem* **1984**, *27*(1), 67-71.

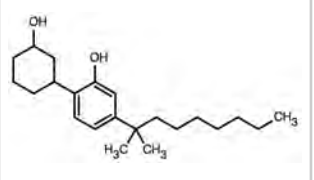


Catalog number : 7298-001 **CASRN :** 70434-92-3

Name : Cannabicyclohexanol; (±)-CP-47,497 C8 homolog

Mol. formula : $C_{22}H_{36}O_2$ **FW :** 332.52 **DEA schedule :** 1

References : Compton DR, Johnson MR, Melvin LS, Martin BR, *J Pharm Exp Ther*, **1992**, *260*(1), 201-209.



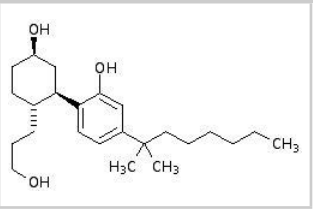
Catalog number : NOCD-091 **CASRN :** 83002-04-4

Name : (-)-CP 55,940

Mol. formula : $C_{24}H_{40}O_3$ **FW :** 376.58 **DEA schedule :** 0

Notes : *High-affinity cannabinoid CB1 and CB2 receptor agonist*

References : Melvin, LS; *et al. J Med Chem* **1984**, *27*, 67-71.

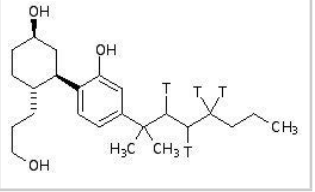


Catalog number : NOCD-092 **CASRN :** 119095-48-6

Name : [2,3,4,4-$^3H_4$](-)-CP 55,940

Mol. formula : $C_{24}H_{40}O_3$ **FW :** 376.58 **DEA schedule :** 0

Notes : *High affinity CB1 and CB2 receptor radioligand (tritium-labeled).*



Cannabinoids: Cannabidiol Class

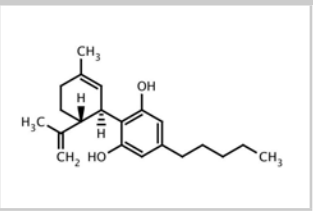
Catalog number : 7360-021 **CASRN :** 13956-29-1

Name : (-)-Cannabidiol

Mol. formula : $C_{21}H_{30}O_2$ **FW :** 314.46 **DEA schedule :** 1

Notes : *CB_1 and CB_2 receptor antagonist*

References : Petitet, F; *et al. Life Sci* ***1998**, 63, PL1-6.*
Costa, B; *et al. Br J Pharmacol* ***2004**, 143, 247-50.*
Thomas, A; *et al. Br J Pharmacol* ***2007**, 150, 613-23.*



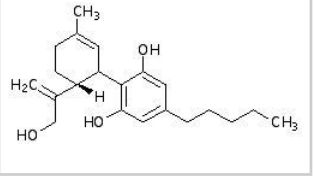
Catalog number : 7360-022

Name : 10-Hydroxycannabidiol

Mol. formula : $C_{21}H_{30}O_3$ **FW :** 330.46 **DEA schedule :** 1

Notes : *Cannabidiol metabolite.*

References : Lander, N; *et al. J Chem Soc., Perkin Trans 1* **1976**, 8-16.



Cannabinoids: Cannabigerol Class

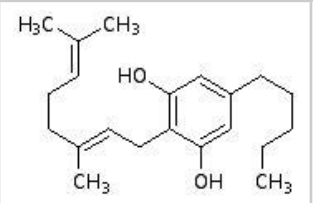
Catalog number : 7360-010 **CASRN :** 25654-31-3

Name : Cannabigerol

Mol. formula : $C_{21}H_{32}O_2$ **FW :** 316.48 **DEA schedule :** 1

Notes : *Analgesic; anti-inflammatory*

References : Williamson, EM; Evans, FJ *Drugs* **2000**, *60*, 1303-14.



Cannabinoids: Cannabinol Class

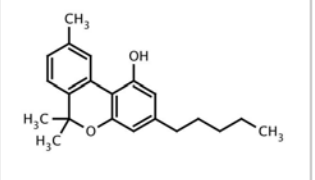
Catalog number : 7360-013 **CASRN :** 21-35-7

Name : Cannabinol; CBN

Mol. formula : $C_{21}H_{26}O_2$ **FW :** 310.43 **DEA schedule :** 1

Notes : *Inactive constituent of cannabis.*

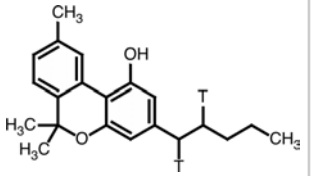
References : Mahadevan, A*; et al. J Med Chem* **2000**, *43*, 3778-85.



Catalog number : 7360-023

Name : [1',2'-$^3H_2$]Cannabinol

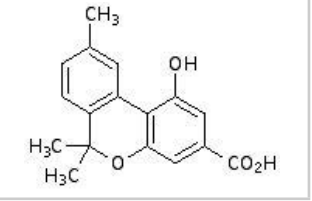
Mol. formula : $C_{21}H_{26}O_2$ **FW :** 310.43 **DEA schedule :** 1



Catalog number : 7360-020 **CASRN :** 60788-14-9

Name : 1',2',3',4',5'-Pentanorcannabinol-3-carboxylic acid

Mol. formula : $C_{17}H_{16}O_4$ **FW :** 284.31 **DEA schedule :** 1



Cannabinoids: Enzyme Inhibitors

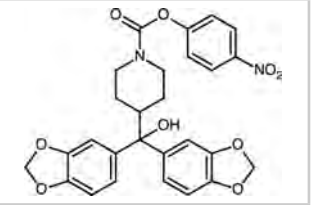
Catalog number : NOCD-037 **CASRN :** 1101854-58-3

Name : JZL184

Mol. formula : $C_{27}H_{24}N_2O_9$ **FW :** 520.49 **DEA schedule :** 0

Notes : *Potent and selective inhibitor of monoacylglycerol lipase (MAGL).*

References : Long, JZ*; et al. Nat Chem Biol* **2009**, *5*, 37-44.



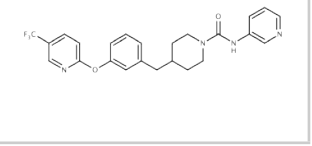
Catalog number : NOCD-124 **CASRN :** 1196109-52-0

Name : PF-3845

Mol. formula : $C_{24}H_{23}F_3N_4O_2$ **FW :** 456.47 **DEA schedule :** 0

Notes : *Selective fatty acid amide hydrolase (FAAH) inhibitor.*

References : Ramesh D, Ross GR, Schlosburg JE, Owens RA, Abdullah RA, Kinsey SG, Long JZ, Nomura DK, Sim-Selley LJ, Cravatt BF, Akbarali HI, Lichtman AH, *J Pharmacol Exp Ther* **2011**, *339*(1), 173-85.



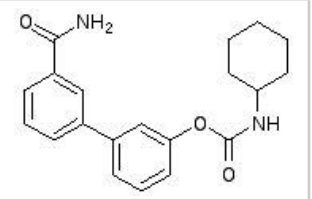
Catalog number : NOCD-098 **CASRN :** 546141-08-6

Name : Cyclohexylcarbamic Acid 3'-carbamoylbiphenyl-3-yl ester; URB 597

Mol. formula : $C_{20}H_{22}N_2O_3$ **FW :** 338.41 **DEA schedule :** 0

Notes : *Fatty acid amide hydrolase (FAAH) inhibitor.*

References : Cravatt BF; *et al. Nature* **1996**, *384*, 83.
Kathuria S; *et al. Nat Med* **2003**, *9*, 76.



Cannabinoids: Fatty Acid Derivatives (Anandamides)

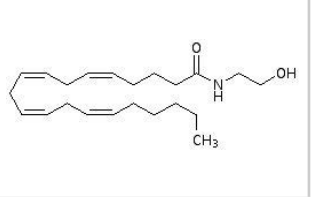
Catalog number : NOCD-080 **CASRN :** 94421-68-8

Name : Arachidonylethanolamide; Anandamide

Mol. formula : $C_{22}H_{37}NO_2$ **FW :** 347.54 **DEA schedule :** 0

Notes : *Cannabinoid CB1 and CB2 receptor agonist.*

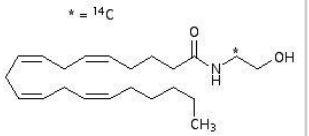
References : Devane, WA; *et al. Science* **1992**, *258*, 1946-9.



Catalog number : NOCD-007

Name : Arachidonyl[1-^{14}C]ethanolamide

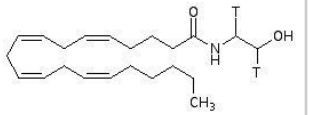
Mol. formula : $C_{23}H_{37}NO_2$ **FW :** 361.56 **DEA schedule :** 0



Catalog number : NOCD-008

Name : Arachidonyl[1,2-^{3}H]ethanolamide; Tritiated Anandamide

Mol. formula : $C_{22}H_{37}NO_2$ **FW :** 347.54 **DEA schedule :** 0

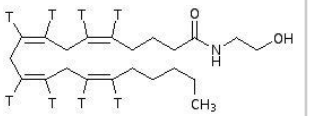


Catalog number : NOCD-078

Name : Tritium-labeled Arachidonylethanolamide; Tritiated Anandamide

Mol. formula : $C_{22}H_{37}NO_2$ **FW :** 347.54 **DEA schedule :** 0

Notes : *Cannabinoid CB1 and CB2 receptor radioligand.*

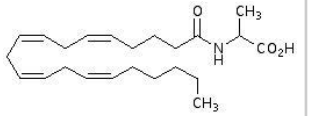


Cannabinoids: Fatty Acid Derivatives (Arachidonyl amides)

Catalog number : NOCD-097 **CASRN :** 401941-73-9

Name : N-Arachidonyl-L-alanine

Mol. formula : $C_{23}H_{37}NO_3$ **FW :** 375 **DEA schedule :** 0



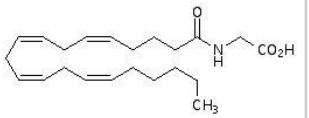
Catalog number : NOCD-096 **CASRN :** 179113-91-8

Name : N-Arachidonylglycine; NAGly

Mol. formula : $C_{22}H_{35}NO_3$ **FW :** 361 **DEA schedule :** 0

Notes : *Endogenous anandamide-like compound with analgesic properties (although it lacks CB1 receptor and anandamide transporter affinity).*

References : Sheskin, T; *et al. J Med Chem* **1997**, *40*, 659-67.
Huang, SM; *et al. J Biol Chem* **2001**, *276*, 42639-44.



Cannabinoids: Fatty Acid Derivatives (Arachidonyl esters)

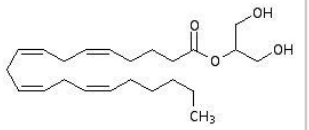
Catalog number : NOCD-089 **CASRN :** 53847-30-6

Name : 2-Arachidonylglycerol; 2-AG

Mol. formula : $C_{23}H_{38}O_4$ **FW :** 378.5 **DEA schedule :** 0

Notes : *Cannabinoid CB1 receptor agonist.*

References : Stella, N; Schweitzer P; Piomelli DNature **1997**, *388*, 773-8.



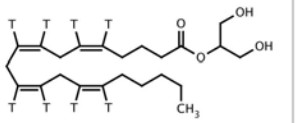
Catalog number : NOCD-018

Name : [^{3}H]-2-Arachidonylglycerol; [^{3}H]-2-AG

Mol. formula : $C_{23}H_{38}O_4$ **FW :** 378.55 **DEA schedule :** 0

Notes : *Cannabinoid CB1 receptor agonist (tritium-labeled).*

References : Stella, N; Schweitzer, P; Piomelli, D *Nature* **1997**, *388*, 773-8.



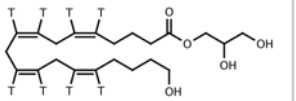
Catalog number : NOCD-035

Name : Tritium-labeled 1-Arachidonylglycerol; [^{3}H]-1-AG

Mol. formula : $C_{23}H_{38}O_4$ **FW :** 378.55 **DEA schedule :** 0

Notes : *Cannabinoid CB1 receptor agonist (tritium-labeled).*

References : Stella, N; Schweitzer, P; Piomelli D *Nature* **1997**, *388*, 773-8.



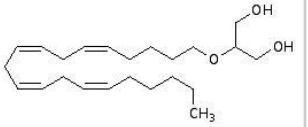
Catalog number : NOCD-095 **CASRN :** 222723-55-9

Name : Noladin

Mol. formula : $C_{23}H_{40}O_3$ **FW :** 364.57 **DEA schedule :** 0

Notes : *Cannabinoid CB1 receptor agonist*

References : Hanus, L; *et al. Proc Natl Acad Sci USA* **2001**, *98*, 3662-5.



Cannabinoids: Fatty Acid Derivatives (Palmitoyl amides)

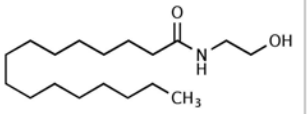
Catalog number : NOCD-002 **CASRN :** 544-31-0

Name : Palmitoyl ethanolamide; Palmidrol

Mol. formula : $C_{18}H_{37}NO_2$ **FW :** 299.49 **DEA schedule :** 0

Notes : *Cannabinoid CB2 receptor agonist.*

References : Hanus, L*; et al. J Med Chem* **1993**, *36*, 3032-4.

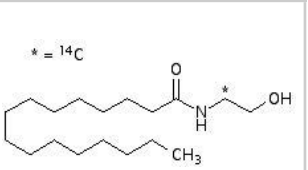


Catalog number : NOCD-005

Name : Palmitoyl[1-^{14}C]ethanolamide

Mol. formula : $C_{18}H_{37}NO_2$ **FW :** 299.49 **DEA schedule :** 0

Notes : *Cannabinoid CB2 receptor agonist (carbon-labeled).*



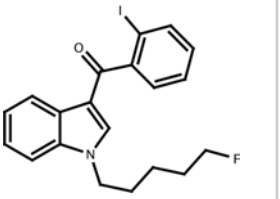
Cannabinoids: Indole Analogs & Related Compounds

Catalog number : 7694-001 **CASRN :** 335161-03-0

Name : AM-694

Mol. formula : $C_{20}H_{19}FINO$ **FW :** 435.27 **DEA schedule :** 1

References : Logan BK, Reinhold LE, Xu A, Diamond FX, *J Forensic Sci*, **2012**, *57*(5), 1168-1180.



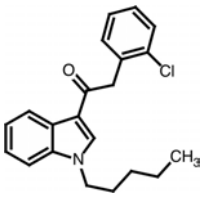
Catalog number : 7203-001 **CASRN :** 864445-54-5

Name : JWH-203

Mol. formula : $C_{21}H_{22}ClNO$ **FW :** 339.86 **DEA schedule :** 1

Notes : *Non-selective CB_1/CB_2 cannabinoid receptor agonist.*

References : Huffman JW, Szklennik PV, Almond A, Bushell K, Selley DE, He H, Cassidy MP, Wiley JL, *et al., Bioorg Med Chem Letters*, **2005**, *15*(18), 4110-4113.



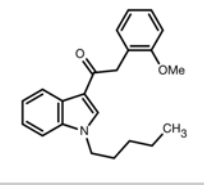
Catalog number : 6250-001 **CASRN :** 864445-43-2

Name : JWH-250

Mol. formula : $C_{22}H_{25}NO_2$ **FW :** 335.44 **DEA schedule :** 1

Notes : *Non-selective CB_1/CB_2 cannabinoid receptor agonist.*

References : Huffman JW, Szklennik PV, Almond A, Bushell K, Selley DE, He H, Cassidy MP, Wiley JL, *et al., Bioorg Med Chem Letters*, **2005**, *15*(18), 4110-4113.



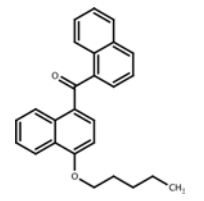
Catalog number : NOCD-036 **CASRN :** 432047-72-8

Name : Naphthalen-1-yl-(4-pentyloxynaphthalen-1-yl)methanone

Mol. formula : $C_{26}H_{24}O_2$ **FW :** 368.47 **DEA schedule :** 0

Notes : *Orally bioavailable human CB1/CB2 dual agonist with antihyperalgesic properties and limited CNS penetration.*

References : Dziadulewicz, EK; *et al. J Med Chem* **2007**, *50*, 3851-6.



Cannabinoids: Indole, Alkylnaphthoyl Class

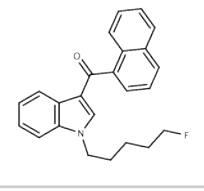
Catalog number : 7201-001 **CASRN :** 335161-24-5

Name : AM-2201

Mol. formula : $C_{24}H_{22}FNO$ **FW :** 359.44 **DEA schedule :** 1

Notes : *Non-selective CB_1/CB_2 cannabinoid receptor agonist.*

References : Makriyannis, A; Deng H, Cannabimimetic Indole Derivatives, US Patent 7,241,799 B2 (**2007**).

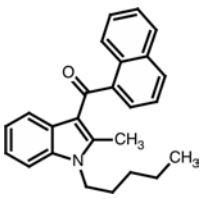


Catalog number : 7007-001 **CASRN :** 155471-10-6

Name : JWH-007

Mol. formula : $C_{25}H_{25}NO$ **FW :** 355.47 **DEA schedule :** 1

References : Huffman JW, Dong D, *Bioorg Med Chem Letters*, **1994**, *4*(4), 563-566.



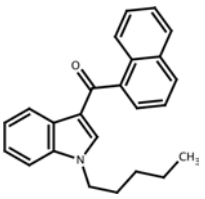
Catalog number : 7118-001 **CASRN :** 209414-07-3

Name : JWH-018

Mol. formula : $C_{24}H_{23}NO$ **FW :** 341.45 **DEA schedule :** 1

Notes : *Non-selective CB_1/CB_2 cannabinoid receptor agonist.*

References : Huffman J, Zengin G, Wu M, Lu J, Hynd G, Bushell K, Thompson A, Bushell S, *et al.*, *Bioorg Med Chem*, **2005**, *13*(1), 89-112.

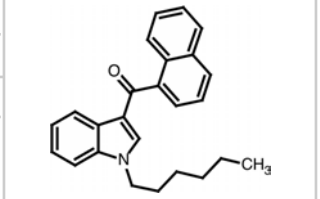


Catalog number : 7019-001 **CASRN :** 209414-08-4

Name : JWH-019

Mol. formula : $C_{25}H_{25}NO$ **FW :** 355.47 **DEA schedule :** 1

References : Poso A, Huffman JW, *Br J Pharm*, **2008**, *153*(2), 335-346.



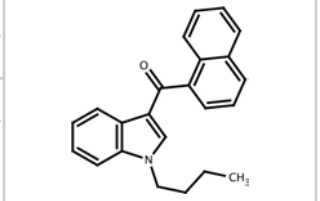
Catalog number : 7173-001 **CASRN :** 208987-48-8

Name : JWH-073

Mol. formula : $C_{23}H_{21}NO$ **FW :** 327.42 **DEA schedule :** 1

Notes : *Non-selective CB_1/CB_2 cannabinoid receptor agonist.*

References : Wiley, JL; *et al., J Pharmacol Exp Ther* **1998**, *285*, 995-1004.



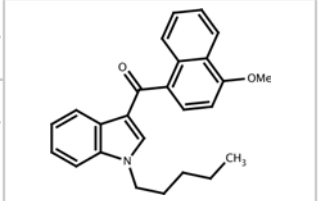
Catalog number : 7081-001 **CASRN :** 210179-46-7

Name : JWH-081

Mol. formula : $C_{25}H_{25}NO_2$ **FW :** 371.47 **DEA schedule :** 1

Notes : *Non-selective CB_1/CB_2 cannabinoid receptor agonist.*

References : Huffman J, Zengin G, Wu M, Lu J, Hynd G, Bushell K, Thompson A, Bushell S, *et al.*, *Bioorg Med Chem*, **2005**, *13*(1), 89-112.

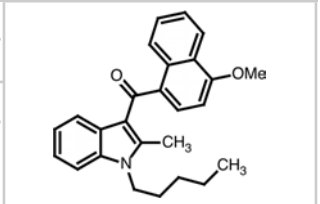


Catalog number : 7098-001 **CASRN :** 316189-74-9

Name : JWH-098

Mol. formula : $C_{26}H_{27}NO_2$ **FW :** 385.50 **DEA schedule :** 1

References : Huffman JW, Zengin G, Wu MJ, Lu J, Hynd G, Bushell K, Thompson ALS, Bushell S, Tartal C, Hurst DP, Reggio PH, Selley DE, Cassidy MP, Wiley JL, Martin BR, *Bioorg Med Chem*, **2005**, *13*, 89-112.

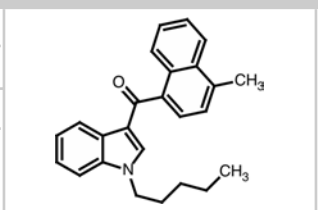


Catalog number : 7122-001 **CASRN :** 619294-47-2

Name : JWH-122

Mol. formula : $C_{25}H_{25}NO$ **FW :** 355.47 **DEA schedule :** 1

References : Huffman J, Zengin G, Wu M, Lu J, Hynd G, Bushell K, Thompson A, Bushell S, *et al.*, *Bioorg Med Chem*, **2005**, *13*(1), 89-112.

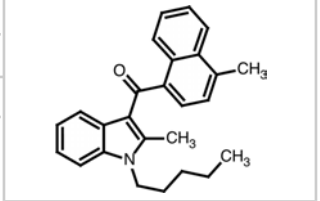


Catalog number : 7149-001 **CASRN :** 548461-82-1

Name : JWH-149

Mol. formula : $C_{26}H_{27}NO$ **FW :** 369.50 **DEA schedule :** 1

References : Huffman J, Zengin G, Wu M, Lu J, Hynd G, Bushell K, Thompson A, Bushell S, *et al.*, *Bioorg Med Chem*, **2005**, *13*(1), 89-112.



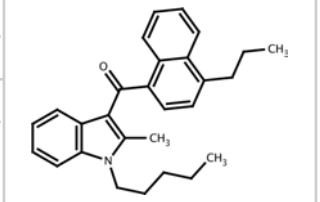
Catalog number : 7181-001 **CASRN :** 824960-03-4

Name : JWH-181

Mol. formula : $C_{28}H_{31}NO$ **FW :** 397.55 **DEA schedule :** 1

Notes : *Non-selective CB_1/CB_2 cannabinoid receptor agonist.*

References : Huffman J, Zengin G, Wu M, Lu J, Hynd G, Bushell K, Thompson A, Bushell S, *et al.*, *Bioorg Med Chem*, **2005**, *13*(1), 89-112.



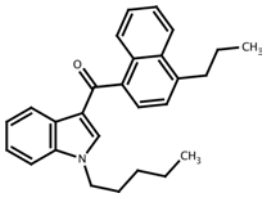
Catalog number : 7182-001 **CASRN :** 824960-02-3

Name : JWH-182

Mol. formula : $C_{27}H_{29}NO$ **FW :** 383.53 **DEA schedule :** 1

Notes : *Non-selective CB_1/CB_2 cannabinoid receptor agonist.*

References : Huffman J, Zengin G, Wu M, Lu J, Hynd G, Bushell K, Thompson A, Bushell S, *et al.*, *Bioorg Med Chem*, **2005**, *13*(1), 89-112.

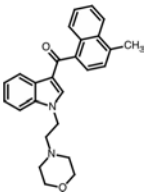


Catalog number : 7193-001 **CASRN :** 133438-58-1

Name : JWH-193

Mol. formula : $C_{26}H_{26}N_2O_2$ **FW :** 398.50 **DEA schedule :** 1

References : Huffman JW, Padgett LW, Curr Med Chem, 2005, 12. 1395-1411.

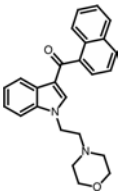


Catalog number : 7200-001 **CASRN :** 103610-04-4

Name : JWH-200; WIN 55,225

Mol. formula : $C_{24}H_{25}N_2O_2$ **FW :** 384.47 **DEA schedule :** 1

References : Dutta AK, Ryan W, Thomas BF, Singer M, Compton DR, Martin BR, Razdan RK, *Bioorg Med Chem*, **1997**, *5*(8), 1591-1600.



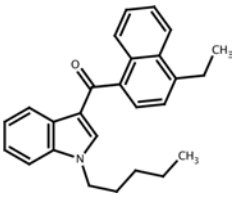
Catalog number : 7210-001 **CASRN :** 824959-81-1

Name : JWH-210

Mol. formula : $C_{26}H_{27}NO$ **FW :** 369.51 **DEA schedule :** 1

Notes : *Non-selective CB_1/CB_2 cannabinoid receptor agonist.*

References : Huffman J, Zengin G, Wu M, Lu J, Hynd G, Bushell K, Thompson A, Bushell S, *et al.*, *Bioorg Med Chem*, **2005**, *13*(1), 89-112.



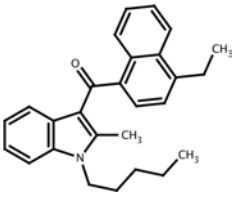
Catalog number : 7213-001 **CASRN :** 824959-83-3

Name : JWH-213

Mol. formula : $C_{27}H_{29}NO$ **FW :** 383.53 **DEA schedule :** 1

Notes : *Non-selective CB_1/CB_2 cannabinoid receptor agonist.*

References : Huffman J, Zengin G, Wu M, Lu J, Hynd G, Bushell K, Thompson A, Bushell S, *et al.*, *Bioorg Med Chem*, **2005**, *13*(1), 89-112.



Cannabinoids: Precursors, Biosynthetic

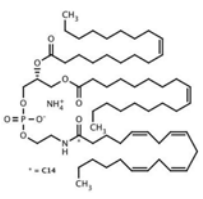
Catalog number : NOCD-009

Name : N-[1-^{14}C]-Arachidonyl-1,2-dioleoyl-*sn*-glycero-3-phosphoethanolamine ammonium salt

Mol. formula : $C_{61}H_{111}N_2O_9P$ **FW :** 1047.52 **DEA schedule :** 0

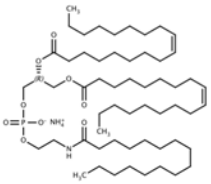
Notes : *Putative biosynthetic precursor of endogenous cannabinoids (carbon-labeled).*

References : Morishita, J; *et al. J Neurochem* **2005**, *94*, 753-62.



Catalog number : NOCD-066

Name : N-Palmitoyl-1,2-dioleoyl-*sn*-glycero-3-phosphoethanolamine ammonium salt



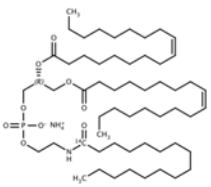
Mol. formula : $C_{57}H_{111}N_2O_9P$ **FW :** 999.47 **DEA schedule :** 0

Notes : *Putative biosynthetic precursor of endogenous cannabinoids.*

References : Morishita, J; *et al. J Neurochem* **2005**, *94*, 753-62.

Catalog number : NOCD-000

Name : N-[1-^{14}C]-Palmitoyl-1,2-dioleoyl-*sn*-glycero-3-phosphoethanolamine ammonium salt



Mol. formula : $C_{57}H_{111}N_2O_9P$ **FW :** 999.47 **DEA schedule :** 0

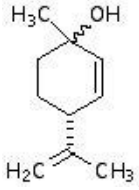
Notes : *Putative biosynthetic precursor of endogenous cannabinoids (carbon-labeled).*

References : Morishita J; *et al. J Neurochem* **2005**, *94*, 753-62.

Cannabinoids: Precursors, Synthetic

Catalog number : NOCD-093 **CASRN :** 52154-82-2

Name : *p*-Mentha-2,8-dien-1-ol



Mol. formula : $C_{10}H_{16}O$ **FW :** 152.2 **DEA schedule :** 0

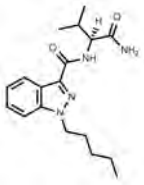
Notes : *Cannabinoid synthetic precursor*

References : Razdan RK; Dalzell HC; Handrick GR *J Am Chem Soc* **1974**, *96*, 5860-5865.

Cannabinoids: Pyrazole Class

Catalog number : 7023-001 new **CASRN :** 1445752-09-9

Name : AB-PINACA

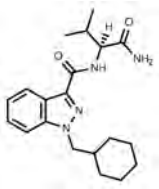


Mol. formula : $C_{18}H_{26}N_4O_2$ **FW :** 330.43 **DEA schedule :** 1

References : Uchiyama, N., Matsuda, S., Wakana, D., *et al.*, *Forensic Toxicol.*,**2012**, *31*(1), 93-100.

Catalog number : 7031-001 new **CASRN :** 1185887-21-1

Name : AB-CHMINACA

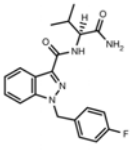


Mol. formula : $C_{20}H_{28}N_4O_2$ **FW :** 356.47 **DEA schedule :** 1

References : Uchiyama, N., Matsuda, S., Wakana, D., *et al.*, *Forensic Toxicol.*,**2012**, *31*(1), 93-100.

Catalog number : 7012-001 **CASRN :** 1185282-01-2

Name : AB-FUBINACA



Mol. formula : $C_{20}H_{21}N_4O_2$ **FW :** 368.41 **DEA schedule :** 1

Notes : *CB_1 receptor agonist.*

References : Uchiyama, N., Matsuda, S., Wakana, D., *et al.*, *Forensic Toxicol.*,**2012**, *31*(1), 93-100.

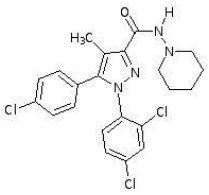
Catalog number : NOCD-082

Name : SR141716

Mol. formula : $C_{22}H_{21}Cl_3N_4O$ **FW :** 463.78 **DEA schedule :** 0

Notes : *Cannabinoid CB1 receptor ligand*

References : Seltzman, H; *et al. J Chem Soc, Chem Commun* **1995**, 1549-1550.



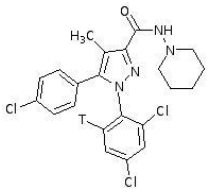
Catalog number : NOCD-083 **CASRN :** 170937-38-9

Name : [2,4-Dichlorophenyl-6-^{3}H]SR141716

Mol. formula : $C_{22}H_{21}Cl_3N_4O$ **FW :** 465.80 **DEA schedule :** 0

Notes : *Cannabinoid CB1 receptor radioligand (tritium-labeled).*

References : Seltzman, H; *et al. J Chem Soc, Chem Commun* **1995**, 1549-1550.



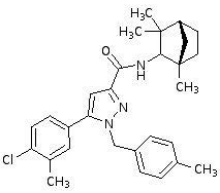
Catalog number : NOCD-085 **CASRN :** 192703-06-3

Name : SR144528

Mol. formula : $C_{29}H_{34}ClN_3O$ **FW :** 476.05 **DEA schedule :** 0

Notes : *Cannabinoid CB2 receptor antagonist*

References : Portier, M; *et al. J Pharmacol Exp Ther* **1999**, *288*, 582-9.
Rinaldi-Carmona, M; *et al. J Pharmacol Exp Ther* **1998**, *284*, 644-50.



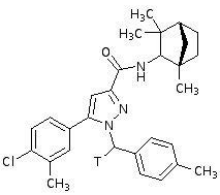
Catalog number : NOCD-086 **CASRN :** 475471-24-0

Name : Tritium-labeled SR144528

Mol. formula : $C_{29}H_{34}N_3OCl$ **FW :** 478.05 **DEA schedule :** 0

Notes : *Cannabinoid CB2 receptor radioligand (tritium-labeled).*

References : Portier, M; *et al. J Pharmacol Exp Ther* **1999**, *288*, 582-9.
Rinaldi-Carmona, M; *et al. J Pharmacol Exp Ther* **1998**, *284*, 644-50.



Cannabinoids: Tetrahydrocannabinol Class

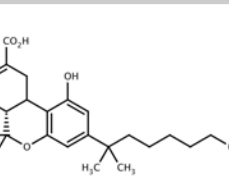
Catalog number : 7370-042 **CASRN :** 137945-48-3

Name : Ajulemic acid; IP-751

Mol. formula : $C_{25}H_{36}O_4$ **FW :** 400.55 **DEA schedule :** 1

Notes : *Non-psychoactive cannabinoid.*

References : Burstein, S *AAPS J* **2005**, *7*, E143-8.
Wiley, JL *IDrugs* **2005**, *8*, 1002-11.

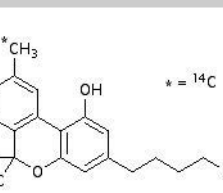


Catalog number : 7360-015

Name : [11-^{14}C]Cannabinol

Mol. formula : $C_{2014}CH_{26}O_2$ **FW :** 310.43 **DEA schedule :** 1

Notes : *Inactive constituent of cannabis (carbon-labeled).*

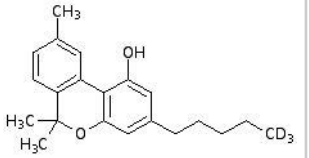


Catalog number : 7360-014

Name : [5'-$^{2}H_3$]Cannabinol

Mol. formula : $C_{21}H_{26}O_2$ **FW :** 310.43 **DEA schedule :** 1

Notes : *Inactive constituent of cannabis (deuterium-labeled).*

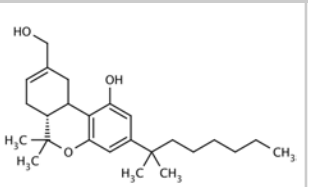


Catalog number : 7370-057 **CASRN :** 112830-95-2

Name : HU 210

Mol. formula : $C_{25}H_{38}O_3$ **FW :** 386.57 **DEA schedule :** 1

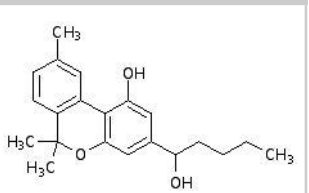
References : Ottani, A; Giuliani, D *CNS Drug Rev* **2001**, *7*, 131-45.



Catalog number : 7360-017

Name : 1'-Hydroxycannabinol

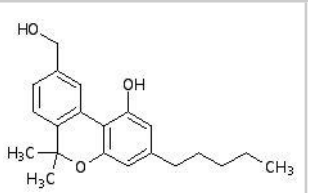
Mol. formula : $C_{21}H_{26}O_3$ **FW :** 326.43 **DEA schedule :** 1



Catalog number : 7360-016

Name : 11-Hydroxycannabinol

Mol. formula : $C_{21}H_{26}O_3$ **FW :** 326.43 **DEA schedule :** 1



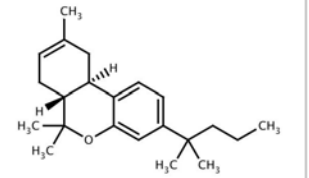
Catalog number : 7133-001 **CASRN :** 259869-55-1

Name : JWH-133

Mol. formula : $C_{22}H_{32}O$ **FW :** 312.49 **DEA schedule :** 1

Notes : *Selective CB_2 receptor agonist.*

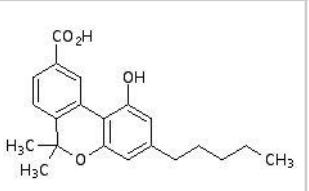
References : Huffman, JW; et al., *Bioorganic & Medicinal Chemistry* **1999**, *7*, 2905-2914.



Catalog number : 7360-019 **CASRN :** 53989-32-5

Name : 9-Carboxy-11-norcannabinol

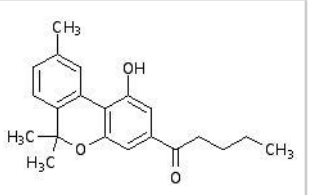
Mol. formula : $C_{21}H_{24}O_4$ **FW :** 340.41 **DEA schedule :** 1



Catalog number : 7360-018

Name : 1'-Oxocannabinol

Mol. formula : $C_{21}H_{24}O_3$ **FW :** 324.41 **DEA schedule :** 1

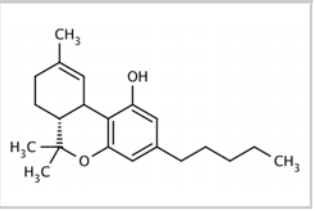


Catalog number : 7370-023 **CASRN :** 1972-08-3

Name : (-)-Δ^9-Tetrahydrocannabinol; THC

Mol. formula : $C_{21}H_{30}O_2$ **FW :** 314.46 **DEA schedule :** 1

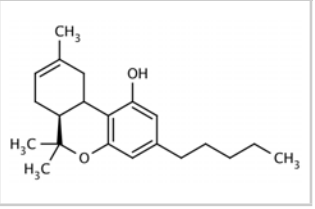
References : *Merck Index*, 14th ed., Monograph 9209.



Catalog number : 7370-053 **CASRN :** 81586-39-2

Name : (+)-Δ^8-THC

Mol. formula : $C_{21}H_{30}O_2$ **FW :** 314.46 **DEA schedule :** 1

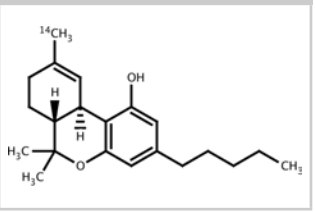


Catalog number : 7370-033

Name : [11-^{14}C]Δ^9-THC

Mol. formula : $C_{21}H_{30}O_2$ **FW :** 316.45 **DEA schedule :** 1

Notes : *Hallucinogen; psychotropic; analgesic (carbon-labeled).*

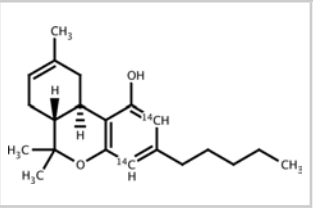


Catalog number : 7370-032

Name : [2,4-^{14}C]Δ^8-THC

Mol. formula : $C_{21}H_{30}O_2$ **FW :** 318.45 **DEA schedule :** 1

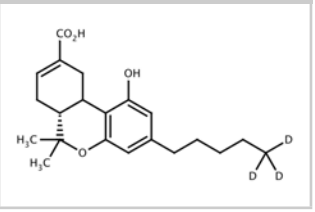
Notes : *Hallucinogen; psychotropic; analgesic (carbon-labeled).*



Catalog number : 7370-038

Name : [5'-$^2H_3$]-11-*nor*-Δ^8-THC-9-carboxylic acid

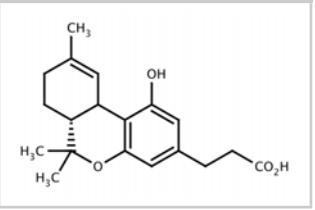
Mol. formula : $C_{21}H_{28}O_4$ **FW :** 347.46 **DEA schedule :** 1



Catalog number : 7370-028

Name : 2'-Carboxy-3',4',5'-*trinor*-Δ^9-THC

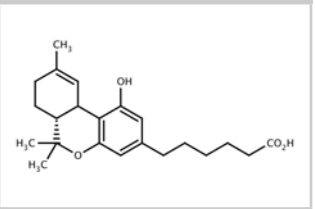
Mol. formula : $C_{19}H_{24}O_4$ **FW :** 316.39 **DEA schedule :** 1



Catalog number : 7370-055

Name : 5'-Carboxy-Δ^9-THC

Mol. formula : $C_{22}H_{30}O_4$ **FW :** 358.47 **DEA schedule :** 1

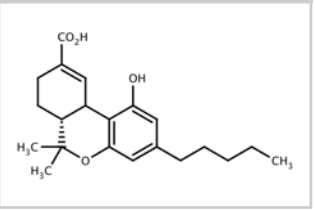


Catalog number : 7370-020 **CASRN :** 56354-06-4

Name : 9-Carboxy-11-*nor*-Δ^9-THC

Mol. formula : $C_{21}H_{28}O_4$ **FW :** 344 **DEA schedule :** 1

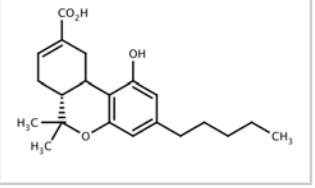
Notes : *Urinary metabolite of THC*



Catalog number : 7370-037 **CASRN :** 39690-06-7

Name : 9-Carboxy-11-*nor*-Δ^8-THC

Mol. formula : $C_{21}H_{28}O_4$ **FW :** 344 **DEA schedule :** 1

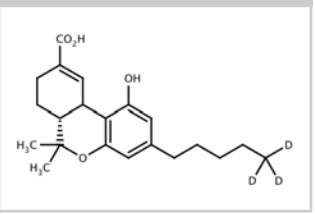


Catalog number : 7370-003 **CASRN :** 113269-48-0

Name : [5'-$^2H_3$]9-Carboxy-11-*nor*-Δ^9-THC

Mol. formula : $C_{21}H_{28}O_4$ **FW :** 347.46 **DEA schedule :** 1

Notes : *Urinary metabolite of THC (deuterium-labeled).*

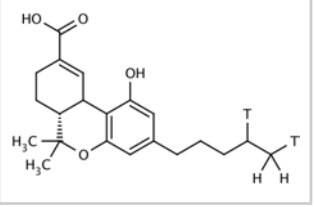


Catalog number : 7370-017

Name : [4',5'-$^3H_2$]9-Carboxy-11-*nor*-Δ^9-THC

Mol. formula : $C_{21}H_{28}O_4$ **FW :** 348.46 **DEA schedule :** 1

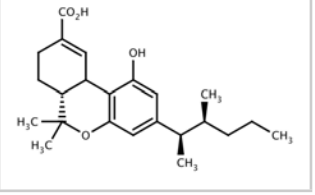
Notes : *Urinary metabolite of THC (tritium-labeled).*



Catalog number : 7370-040 **CASRN :** 199388-13-1

Name : (6a*R*,10a*R*)-3-[(1*S*,2*R*)-1,2-Dimethylheptyl]-6a,7,10,10a-tetrahydro-6,6,9-trimethyl-6H-dibenzo[b,d]pyran-1-ol

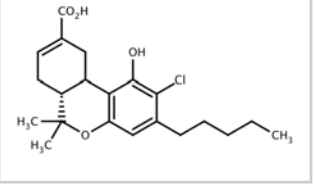
Mol. formula : $C_{23}H_{32}O_4$ **FW :** 372.50 **DEA schedule :** 1



Catalog number : 7370-048

Name : 9-Carboxy-11-*nor*-(2 or 4)-chloro-Δ^8-THC

Mol. formula : $C_{21}H_{27}ClO_4$ **FW :** 378.89 **DEA schedule :** 1

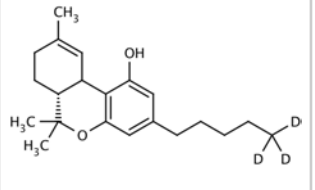


Catalog number : 7370-005 **CASRN :** 81586-39-2

Name : Deuterium-labeled Δ^9-THC

Mol. formula : $C_{21}H_{30}O_2$ **FW :** 317 **DEA schedule :** 1

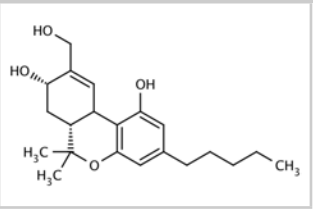
Notes : *Hallucinogen; psychotropic; analgesic (deuterium-labeled).*



Catalog number : 7370-018 **CASRN :** 36913-21-0

Name : 8α,11-Dihydroxy-Δ^9-THC

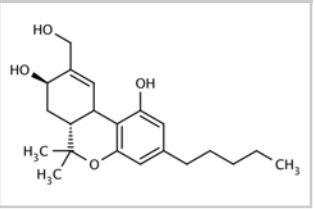
Mol. formula : $C_{21}O_{30}O_4$ **FW :** 346.47 **DEA schedule :** 1



Catalog number : 7370-022 **CASRN :** 57030-51-0

Name : 8β,11-Dihydroxy-Δ^9-THC

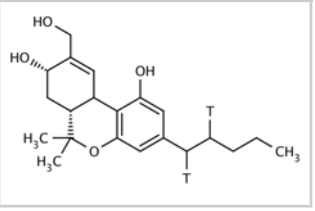
Mol. formula : $C_{21}H_{30}O_4$ **FW :** 346.47 **DEA schedule :** 1



Catalog number : 7370-026

Name : [1',2'-$^3H_2$]-8α,11-Dihydroxy-Δ^9-THC

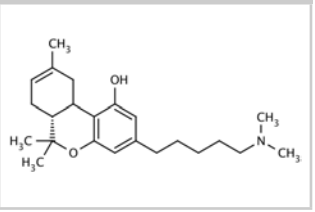
Mol. formula : $C_{21}H_{30}O_4$ **FW :** 350.48 **DEA schedule :** 1



Catalog number : 7370-050

Name : 5'-Dimethylamino-Δ^8-THC

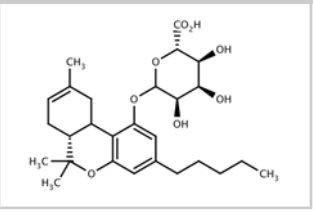
Mol. formula : $C_{23}H_{35}NO_2$ **FW :** 357.53 **DEA schedule :** 1



Catalog number : 7370-049 **CASRN :** 62667-60-1

Name : Δ^8-THC-O-glucuronide

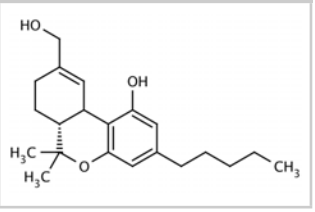
Mol. formula : $C_{27}H_{38}O_8$ **FW :** 490.6 **DEA schedule :** 1



Catalog number : 7370-008 **CASRN :** 36557-05-08

Name : 11-Hydroxy-Δ^9-THC

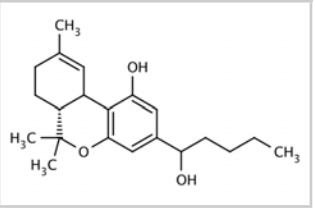
Mol. formula : $C_{21}H_{30}O_3$ **FW :** 330.47 **DEA schedule :** 1



Catalog number : 7370-011

Name : 1'-Hydroxy-Δ^9-THC (Isomer B)

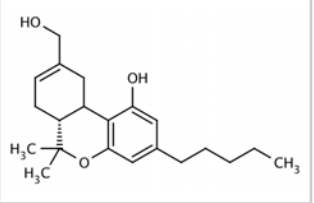
Mol. formula : $C_{21}H_{30}O_3$ **FW :** 330.46 **DEA schedule :** 1



Catalog number : 7370-034

Name : 11-Hydroxy-Δ^8-THC

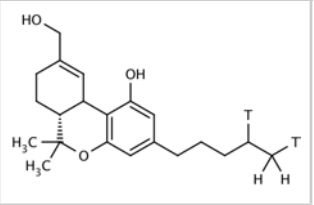
Mol. formula : $C_{21}H_{30}O_3$ **FW :** 330.46 **DEA schedule :** 1



Catalog number : 7370-024

Name : [4',5'-$^3H_2$]-11-Hydroxy-Δ^9-THC

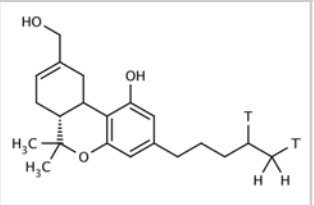
Mol. formula : $C_{21}H_{30}O_2$ **FW :** 318.48 **DEA schedule :** 1



Catalog number : 7370-035

Name : [4',5'-$^3H_2$]-11-Hydroxy-Δ^8-THC

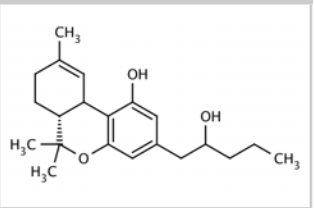
Mol. formula : $C_{21}H_{30}O_2$ **FW :** 318.48 **DEA schedule :** 1



Catalog number : 7370-012

Name : 2'-Hydroxy-Δ^9-THC

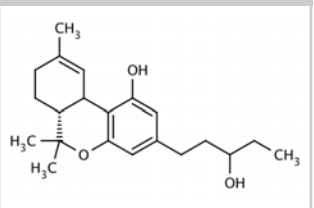
Mol. formula : $C_{21}H_{30}O_3$ **FW :** 330.46 **DEA schedule :** 1



Catalog number : 7370-013

Name : 3'-Hydroxy-Δ^9-THC

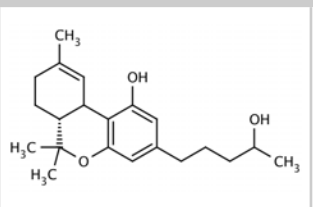
Mol. formula : $C_{21}H_{30}O_3$ **FW :** 330.46 **DEA schedule :** 1



Catalog number : 7370-014

Name : 4'-Hydroxy-Δ^9-THC

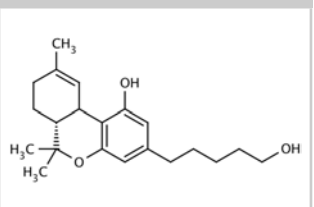
Mol. formula : $C_{21}H_{30}O_3$ **FW :** 330.46 **DEA schedule :** 1



Catalog number : 7370-015

Name : 5'-Hydroxy-Δ^9-THC

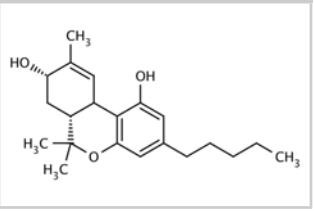
Mol. formula : $C_{21}H_{30}O_3$ **FW :** 330.46 **DEA schedule :** 1



Catalog number : 7370-016

Name : 8α-Hydroxy-Δ^9-THC

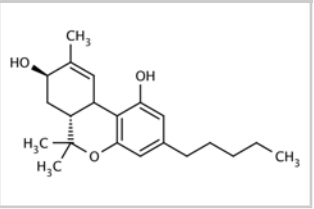
Mol. formula : $C_{21}H_{30}O_3$ **FW :** 330.46 **DEA schedule :** 1



Catalog number : 7370-019 **CASRN :** 34984-78-6

Name : 8β-Hydroxy-Δ^9-THC

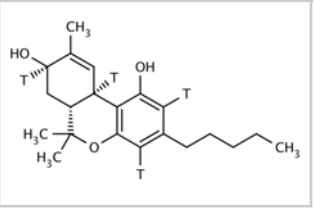
Mol. formula : $C_{21}H_{30}O_3$ **FW :** 330 **DEA schedule :** 1



Catalog number : 7370-021

Name : [2,4,8,10a-$^3H_4$]-8β-Hydroxy-Δ^9-THC

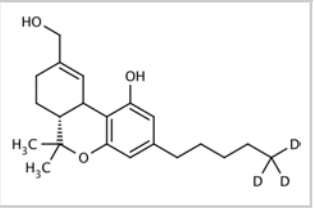
Mol. formula : $C_{21}H_{30}O_3$ **FW :** 338.49 **DEA schedule :** 1



Catalog number : 7370-010 **CASRN :** 130410-26-3

Name : [5'-$^2H_3$]-11-Hydroxy-Δ^9-THC

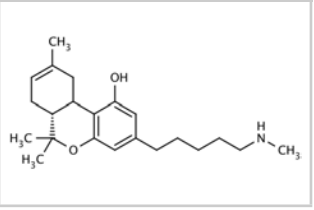
Mol. formula : $C_{21}H_{30}O_3$ **FW :** 333 **DEA schedule :** 1



Catalog number : 7370-054

Name : 5'-Methylamino-Δ^8-THC

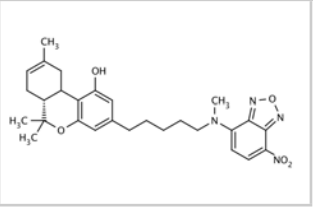
Mol. formula : $C_{22}H_{32}NO_2$ **FW :** 342.49 **DEA schedule :** 1



Catalog number : 7370-036

Name : 5'-N-Methyl-N-4-(7-nitrobenzofurazano)amino-Δ^8-THC

Mol. formula : $C_{28}H_{34}N_4O_5$ **FW :** 506.59 **DEA schedule :** 1

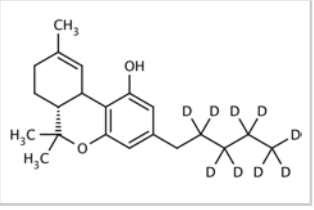


Catalog number : 7370-025

Name : [2',2',3',3',4',4',5',5',5'-$^2H_9$]Δ^9-THC

Mol. formula : $C_{21}H_{30}O_2$ **FW :** 323.52 **DEA schedule :** 1

Notes : *Hallucinogen; psychotropic; analgesic (deuterium-labeled).*

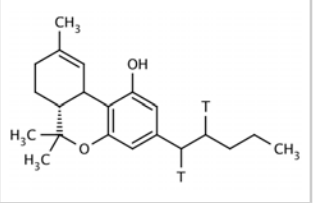


Catalog number : 7370-004

Name : [1',2'-$^3H_2$]Δ^9-THC

Mol. formula : $C_{21}H_{30}O_2$ **FW :** 318.48 **DEA schedule :** 1

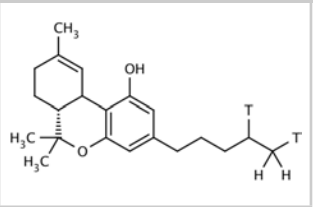
Notes : *Hallucinogen; psychotropic; analgesic (tritium-labeled).*



Catalog number : 7370-009

Name : [4',5'-^{3}H]Δ^9-THC

Mol. formula : $C_{21}H_{30}O_2$ **FW :** 318.48 **DEA schedule :** 1

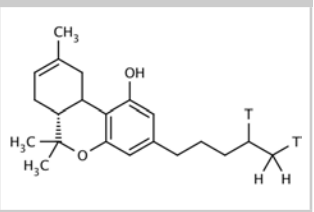


Catalog number : 7370-027

Name : [4',5'-$^3H_2$]Δ^8-THC

Mol. formula : $C_{21}H_{30}O_2$ **FW :** 318.48 **DEA schedule :** 1

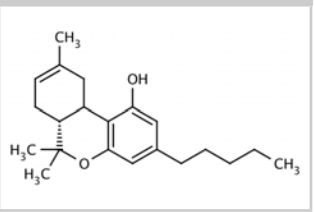
Notes : *Hallucinogen; psychotropic; analgesic (tritium-labeled).*



Catalog number : 7370-030 **CASRN :** 5957-75-5

Name : (-)-*trans*-Δ^8-THC

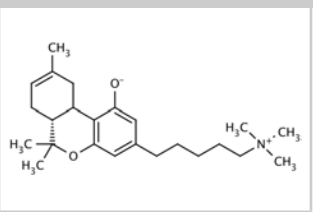
Mol. formula : $C_{21}H_{30}O_2$ **FW :** 314.46 **DEA schedule :** 1



Catalog number : 7370-051

Name : 5'-Trimethylammonium-Δ^8-THC phenolate

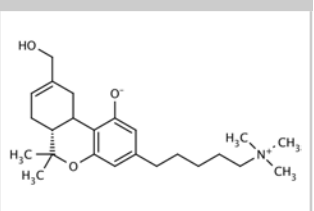
Mol. formula : $C_{24}H_{37}NO_2$ **FW :** 371.56 **DEA schedule :** 1



Catalog number : 7370-056

Name : 5'-Trimethylammonium-11-hydroxy-Δ^8-THC phenolate

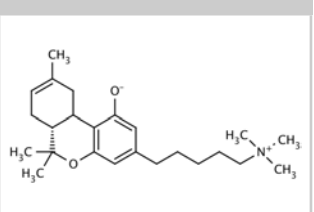
Mol. formula : $C_{24}H_{37}NO_3$ **FW :** 388.56 **DEA schedule :** 1



Catalog number : 7370-052

Name : [$^3H_3$]-5'-Trimethylammonium-Δ^8-THC phenolate

Mol. formula : $C_{24}H_{37}NO_2$ **FW :** 371.56 **DEA schedule :** 1



Cannabinoids (dosage form): Stock Solutions

Catalog number : 7360-009 **CASRN :** 21366-63-2

Name : Cannabicyclol ampuls (1.0 mg/mL in absolute ethanol)

Mol. formula : $C_{21}H_{30}O_2$ **FW :** 314.46 **DEA schedule :** 1

Notes : *Non-psychoactive constituent of cannabis. Photodegradation product of cannabichromene.*

References : Burstein, S; Hunter, SA; Renzulli, LJ *Pharmacol Exp Ther* **1985**, *235*, 87-91.

Dosage Form

Catalog number : 7370-001

Name : Δ^9-THC ampuls (various concentrations in 95% ethanol)

DEA schedule : 1

Dosage Form

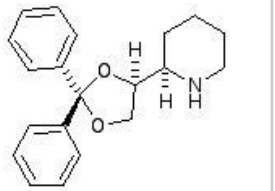
Dissociatives: Dexoxadrol Class

Catalog number : NOCD-068 **CASRN :** 631-06-1

Name : α-(+)-Dexoxadrol hydrochloride

Mol. formula : $C_{20}H_{24}ClNO_2$ **FW :** 345.87 **DEA schedule :** 0

References : Thurkauf, A; *et al. J Med Chem* **1988**, *31*, 2257-63.
Sax, M; Wunsch, B *Curr Top Med Chem* **2006**, *6*, 723-32.

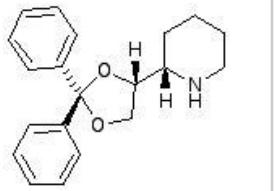


Catalog number : NOCD-069 **CASRN :** 4792-18-1

Name : α-(-)-Levoxadrol hydrochloride

Mol. formula : $C_{20}H_{24}ClNO_2$ **FW :** 345.87 **DEA schedule :** 0

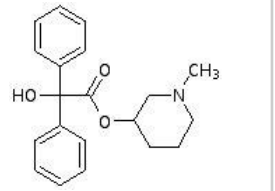
References : Thurkauf, A; *et al. J Med Chem* **1988**, *31*, 2257-63.
Sax, M; Wunsch, B *Curr Top Med Chem* **2006**, *6*, 723-32.



Catalog number : 7484-001

Name : N-Methyl-3-piperidylbenzilate hydrochloride

Mol. formula : $C_{20}H_{24}ClNO_3$ **FW :** 361.86 **DEA schedule :** 1



Dissociatives: Phencyclidine Class

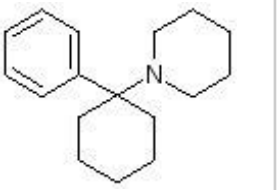
Catalog number : 7471-004 **CASRN :** 956-90-1

Name : Phencyclidine hydrochloride; PCP HCl

Mol. formula : $C_{17}H_{26}ClN$ **FW :** 284.36 **DEA schedule :** 2

Notes : *CNS depressant; anesthetic, psychostimulant*

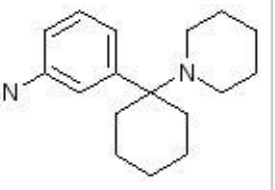
References : *Merck Index*, 14th ed., Monograph 7219.



Catalog number : 7471-041

Name : 1-[1-(*m*-Aminophenyl)cyclohexyl]piperidine lactate

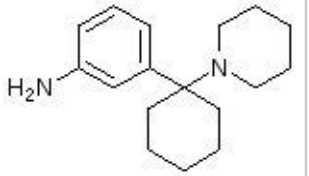
Mol. formula : $C_{20}H_{32}N_2O_3$ **FW :** 348.48 **DEA schedule :** 1



Catalog number : 7471-042

Name : 1-[1-(*m*-Aminophenyl)cyclohexyl]piperidine

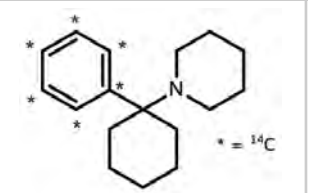
Mol. formula : $C_{17}H_{26}N_2$ **FW :** 258.39 **DEA schedule :** 1



Catalog number : 7471-002

Name : [^{14}C]Phencyclidine HBr; [^{14}C]PCP

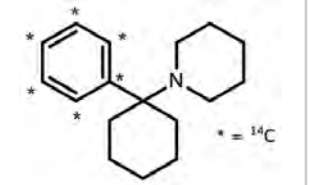
Mol. formula : $C_{18}H_{28}BrN$ **FW :** 523.53 **DEA schedule :** 2



Catalog number : 7471-007

Name : [Phenyl-U-^{14}C]-1-(1-Phenylcyclohexyl)Piperidine; [Phenyl-U-^{14}C]PCP

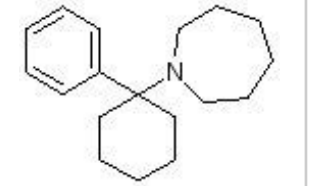
Mol. formula : $C_{17}H_{25}N$ **FW :** 245.39 **DEA schedule :** 2



Catalog number : 7471-023

Name : 1-(1-Phenylcyclohexyl)hexamethyleneimine hydrochloride

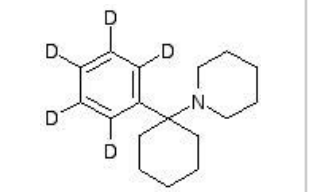
Mol. formula : $C_{18}H_{28}ClN$ **FW :** 293.88 **DEA schedule :** 1



Catalog number : 7471-003

Name : [Phenyl-2,3,4,5,6-$^{2}H_5$]Phencyclidine; [Phenyl-2,3,4,5,6-$^{2}H_5$]PCP

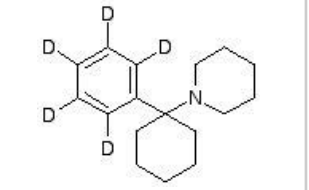
Mol. formula : $C_{17}H_{25}N$ **FW :** 248.42 **DEA schedule :** 2



Catalog number : 7471-006

Name : [Phenyl-$^{2}H_5$]Phencyclidine hydrochloride; [Phenyl-$^{2}H_5$]PCP HCl

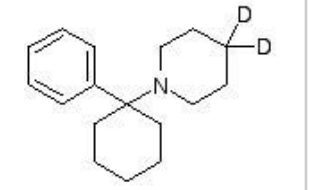
Mol. formula : $C_{17}H_{26}ClN$ **FW :** 284.89 **DEA schedule :** 2



Catalog number : 7471-008

Name : [Piperidino-4,4-$^{2}H_2$]Phencyclidine hydrochloride; [Piperidino-4,4-$^{2}H_2$]PCP

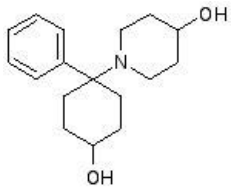
Mol. formula : $C_{17}H_{26}ClN$ **FW :** 281.86 **DEA schedule :** 2



Catalog number : 7471-087

Name : 4-(4'-Hydroxypiperidino)-4-phenylcyclohexanol (*cis*/*trans*)

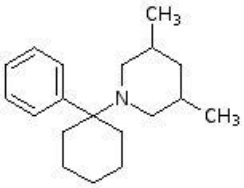
Mol. formula : $C_{17}H_{25}NO_2$ **FW :** 275.40 **DEA schedule :** 1



Catalog number : 7471-019

Name : 1-(1-Phenylcyclohexyl)-3,5-dimethylpiperidine hydrochloride

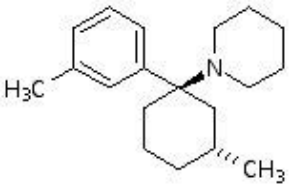
Mol. formula : $C_{19}H_{30}ClN$ **FW :** 307.91 **DEA schedule :** 1



Catalog number : 7471-034

Name : (±)-*cis*-1-[1-(*m*-Tolyl)-3-methylcyclohexyl]piperidine hydrochloride

Mol. formula : $C_{19}H_{30}ClN$ **FW :** 307.91 **DEA schedule :** 1

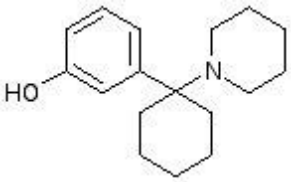


Catalog number : 7471-033 **CASRN :** 79787-43-2

Name : 1-[1-(*m*-Hydroxyphenyl)cyclohexyl]piperidine hydrochloride

Mol. formula : $C_{17}H_{26}ClNO$ **FW :** 295.85 **DEA schedule :** 1

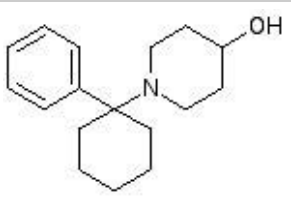
References : Itzhak, Y; Kalir A; Sarne Y *Eur J Pharmacol* **1981**, *73*, 229-33.



Catalog number : 7471-081

Name : 1-(1-Phenylcyclohexyl)-4-hydroxypiperidine

Mol. formula : $C_{17}H_{25}NO$ **FW :** 259.40 **DEA schedule :** 1

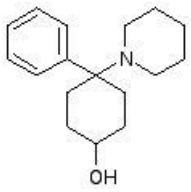


Catalog number : 7471-083 **CASRN :** 60756-83-4

Name : 1-(1-Phenyl-4-hydroxycyclohexyl)piperidine (*cis*/*trans*)

Mol. formula : $C_{17}H_{25}NO$ **FW :** 259.35 **DEA schedule :** 1

References : Carroll, FI; *et al. J Med Chem* **1981**, *24*, 1047-51.
Martin, BR; Vincek WC; Balster RL *Subst Alcohol Actions Misuse* **1981**, *2*, 143-7.

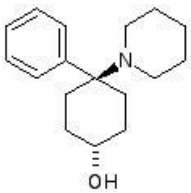


Catalog number : 7471-085

Name : *cis*-1-(1-Phenyl-4-hydroxycyclohexyl)piperidine hydrochloride

Mol. formula : $C_{17}H_{26}ClNO$ **FW :** 295.87 **DEA schedule :** 1

References : Carroll, FI; *et al. J Med Chem* **1981**, *24*, 1047-51.

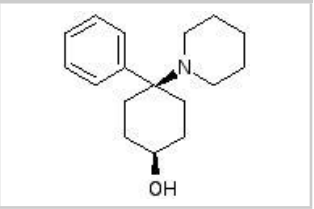


Catalog number : 7471-086

Name : *trans*-1-(1-Phenyl-4-hydroxycyclohexyl)piperidine hydrochloride

Mol. formula : $C_{17}H_{26}ClNO$ **FW :** 295.87 **DEA schedule :** 1

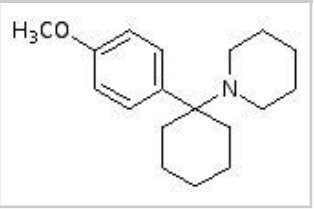
References : Carroll, FI; *et al. J Med Chem* **1981**, *24*, 1047-51.



Catalog number : 7471-028

Name : 1-[1-(*p*-Methoxyphenyl)cyclohexyl]piperidine hydrochloride

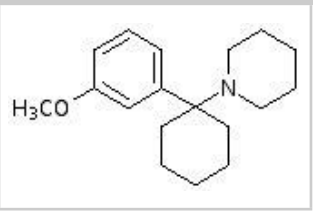
Mol. formula : $C_{18}H_{28}ClNO$ **FW :** 309.88 **DEA schedule :** 1



Catalog number : 7471-039

Name : 1-[1-(*m*-Methoxyphenyl)cyclohexyl]piperidine hydrochloride

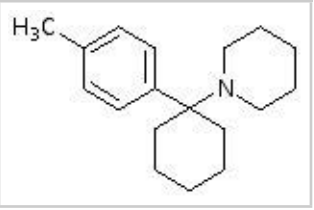
Mol. formula : $C_{18}H_{28}ClNO$ **FW :** 309.88 **DEA schedule :** 1



Catalog number : 7471-022

Name : 1-[1-(*p*-Tolyl)cyclohexyl]piperidine hydrochloride

Mol. formula : $C_{18}H_{28}ClN$ **FW :** 293.88 **DEA schedule :** 1

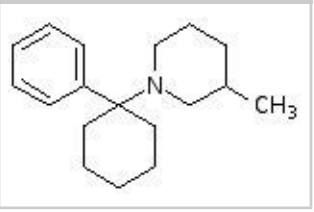


Catalog number : 7471-024 **CASRN :** 2201-41-4

Name : (±)-1-(1-Phenylcyclohexyl)-3-methylpiperidine hydrochloride

Mol. formula : $C_{18}H_{28}ClN$ **FW :** 293.88 **DEA schedule :** 1

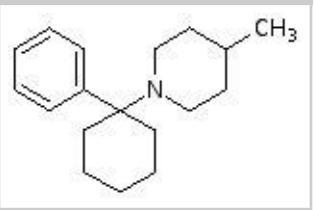
References : Berry, SC; *et al. Eur J Pharmacol* **1983**, *96*, 261-7.



Catalog number : 7471-025 **CASRN :** 1934-50-5

Name : 1-(1-Phenylcyclohexyl)-4-methylpiperidine hydrochloride

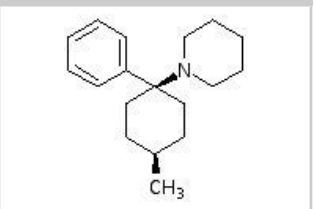
Mol. formula : $C_{18}H_{28}ClN$ **FW :** 293.88 **DEA schedule :** 1



Catalog number : 7471-029

Name : *trans*-1-(1-Phenyl-4-methylcyclohexyl)piperidine hydrochloride

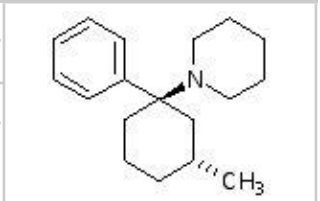
Mol. formula : $C_{18}H_{28}ClN$ **FW :** 293.88 **DEA schedule :** 1



Catalog number : 7471-030

Name : (±)-*cis*-(1-Phenyl-3-methylcyclohexyl)piperidine hydrochloride

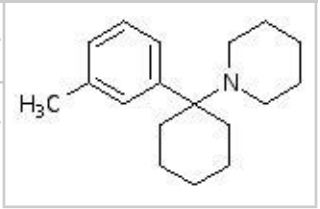
Mol. formula : $C_{18}H_{28}ClN$ **FW :** 293.88 **DEA schedule :** 1



Catalog number : 7471-035

Name : 1-[1-(*m*-Tolyl)cyclohexyl]piperidine hydrochloride

Mol. formula : $C_{18}H_{28}ClN$ **FW :** 293.88 **DEA schedule :** 1

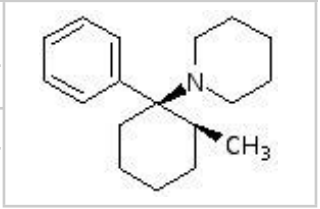


Catalog number : 7471-036 **CASRN :** 59397-29-4

Name : (±)-*trans*-1-(1-Phenyl-2-methylcyclohexyl)piperidine hydrochloride; 1-PMCPP

Mol. formula : $C_{18}H_{28}ClN$ **FW :** 293.88 **DEA schedule :** 1

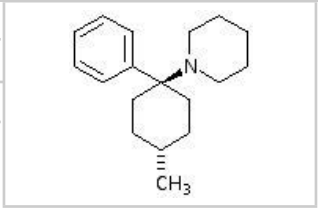
References : Iorio, MA; *et al. J Med Chem* **1991**, *34*, 2615-23.



Catalog number : 7471-040 **CASRN :** 21602-54-0

Name : *cis*-1-(1-Phenyl-4-methylcyclohexyl)piperidine hydrochloride

Mol. formula : $C_{18}H_{28}ClN$ **FW :** 293.88 **DEA schedule :** 1

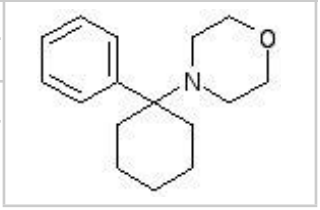


Catalog number : 7471-010 **CASRN :** 2201-40-3

Name : 1-(1-Phenylcyclohexyl)morpholine hydrochloride; PCM hydrochloride

Mol. formula : $C_{16}H_{24}ClNO$ **FW :** 281.83 **DEA schedule :** 1

References : Brine, GA*; et al. J Heterocyclic Chem* **1979**, *16*, 1425.

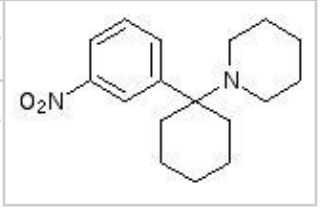


Catalog number : 7471-026 **CASRN :** 70227-29-1

Name : 1-[1-(*m*-Nitrophenyl)cyclohexyl]piperidine

Mol. formula : $C_{17}H_{24}N_2O_2$ **FW :** 288.38 **DEA schedule :** 1

References : Ramoa, AS; Albuquerque EX *FEBS Lett* **1988**, *235*, 156-62.

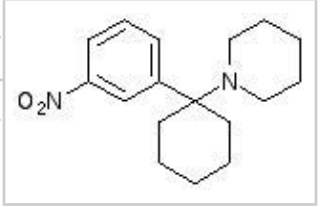


Catalog number : 7471-027

Name : 1-[1-(*m*-Nitrophenyl)cyclohexyl]piperidine hydrochloride

Mol. formula : $C_{17}H_{25}ClN_2O_2$ **FW :** 324.85 **DEA schedule :** 1

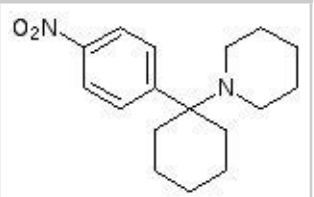
References : Ramoa, AS; Albuquerque EX *FEBS Lett* **1988**, *235*, 156-62.



Catalog number : 7471-031

Name : 1-[1-(*p*-Nitrophenyl)cyclohexyl]piperidine

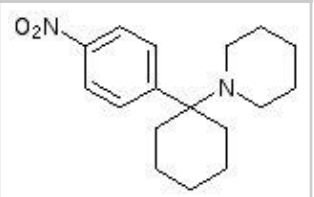
Mol. formula : $C_{17}H_{24}N_2O_2$ **FW :** 288.38 **DEA schedule :** 1



Catalog number : 7471-032

Name : 1-[1-(*p*-Nitrophenyl)cyclohexyl]piperidine hydrochloride

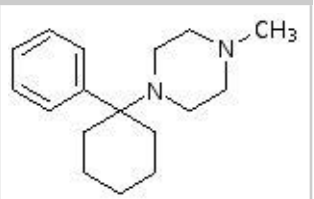
Mol. formula : $C_{17}H_{25}ClN_2O_2$ **FW :** 324.85 **DEA schedule :** 1



Catalog number : 7471-021

Name : 1-(1-Phenylcyclohexyl)-N'-methylpiperazine

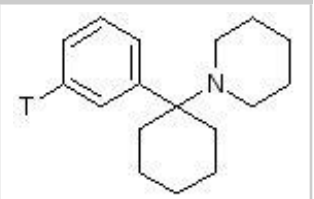
Mol. formula : $C_{17}H_{26}N_2$ **FW :** 258.41 **DEA schedule :** 1



Catalog number : 7471-001

Name : [Phenyl-3-^{3}H(n)]Phencyclidine; [Phenyl-3-^{3}H(n)]PCP

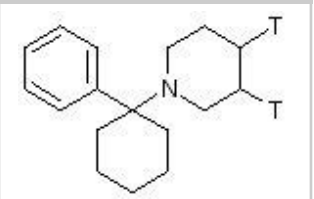
Mol. formula : $C_{17}H_{25}N$ **FW :** 245.40 **DEA schedule :** 2



Catalog number : 7471-043

Name : [3',4'-^{3}H]Phencyclidine; [3,4-^{3}H]PCP

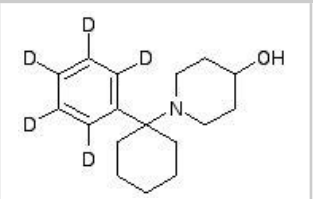
Mol. formula : $C_{17}H_{25}N$ **FW :** 247.4 **DEA schedule :** 2



Catalog number : 7471-082

Name : [Phenyl-$^2H_5$]-1-(1-Phenylcyclohexyl)-4-hydroxypiperidine

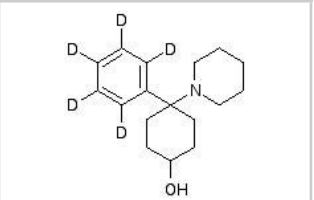
Mol. formula : $C_{17}H_{25}NO$ **FW :** 264.43 **DEA schedule :** 1



Catalog number : 7471-084

Name : [Phenyl-$^2H_5$]-1-(1-Phenyl-4-hydroxycyclohexyl)piperidine (*cis*/*trans*)

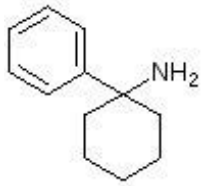
Mol. formula : $C_{17}H_{25}NO$ **FW :** 264.43 **DEA schedule :** 1



Catalog number : 7460-001 **CASRN :** 1934-71-0

Name : 1-Phenylcyclohexylamine hydrochloride; PCA hydrochloride

Mol. formula : $C_{12}H_{18}ClN$ **FW :** 211.74 **DEA schedule :** 1

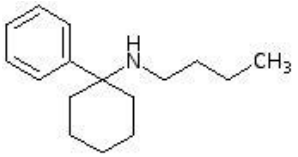


References : Brine, GA*; et al. J Heterocyclic Chem* **1979**, *16*, 1425.
Blake, PA; Yamaguchi, S; Thurkauf, A; Rogawski, MA *Epilepsia* **1992**, *33*, 188-94.

Catalog number : 7460-005

Name : N-Butyl-1-phenylcyclohexylamine hydrochloride

Mol. formula : $C_{16}H_{26}ClN$ **FW :** 267.85 **DEA schedule :** 1

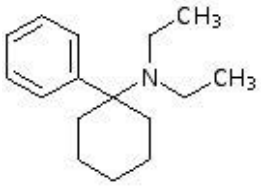


References : Brine, GA*; et al. J Heterocyclic Chem* **1979**, *16*, 1425.

Catalog number : 7455-003 **CASRN :** 2201-19-6

Name : N,N-Diethyl-1-phenylcyclohexylamine hydrochloride; PCDE hydrochloride

Mol. formula : $C_{16}H_{26}ClN$ **FW :** 267.84 **DEA schedule :** 1



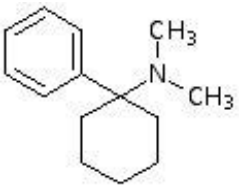
References : Brine, GA*; et al. J Heterocyclic Chem* **1979**, *16*, 1425.

Catalog number : 7455-002 **CASRN :** 2201-17-4

Name : N,N-Dimethyl-1-phenylcyclohexylamine hydrochloride

Mol. formula : $C_{14}H_{22}ClN$ **FW :** 239.82 **DEA schedule :** 1

Notes : *Current designer drug?*

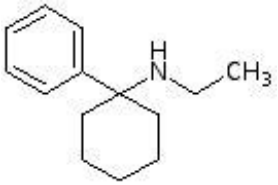


References : Brine, GA*; et al. J Heterocyclic Chem* **1979**, *16*, 1425.

Catalog number : 7455-001 **CASRN :** 2201-15-2

Name : N-Ethyl-1-phenylcyclohexylamine hydrochloride; PCD hydrochloride

Mol. formula : $C_{14}H_{22}ClN$ **FW :** 239.79 **DEA schedule :** 1

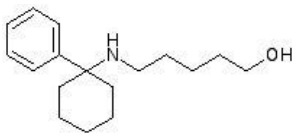


References : Brine, GA; *et al. J Heterocyclic Chem* **1979**, *16*, 1425.
Brady, KT; Balster, RL; Meltzer, LT; Schwertz, D *Pharmacol Biochem Behav* **1980**, *12*, 67-71.

Catalog number : 7471-089

Name : N-(5-Hydroxypentyl)-1-phenylcyclohexylamine hydrochloride

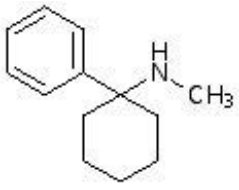
Mol. formula : $C_{17}H_{28}ClNO$ **FW :** 297.87 **DEA schedule :** 0



Catalog number : 7460-002 **CASRN :** 2201-16-3

Name : N-Methyl-1-phenylcyclohexylamine hydrochloride

Mol. formula : $C_{13}H_{20}ClN$ **FW :** 225.76 **DEA schedule :** 1

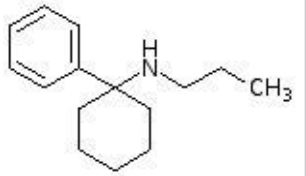


References : Brine, GA*; et al. J Heterocyclic Chem* **1979**, *16*, 1425.

Catalog number : 7460-003 **CASRN :** 18949-81-0

Name : N-Propyl-1-phenylcyclohexylamine hydrochloride

Mol. formula : $C_{15}H_{24}ClN$ **FW :** 253.82 **DEA schedule :** 1

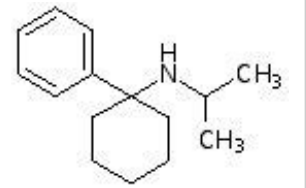


References : Brine, GA*; et al. J Heterocyclic Chem* **1979**, *16*, 1425.

Catalog number : 7460-004

Name : N-(*i*-Propyl)-1-phenylcyclohexylamine hydrochloride

Mol. formula : $C_{15}H_{24}ClN$ **FW :** 253.82 **DEA schedule :** 1

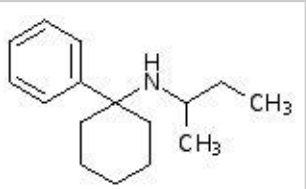


References : Brine, GA*; et al. J Heterocyclic Chem* **1979**, *16*, 1425.

Catalog number : 7460-006

Name : N-(*s*-Butyl)-1-phenylcyclohexylamine hydrochloride

Mol. formula : $C_{16}H_{26}ClN$ **FW :** 267.85 **DEA schedule :** 1

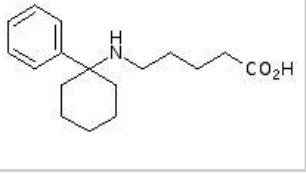


References : Brine, GA*; et al. J Heterocyclic Chem* **1979**, *16*, 1425.

Catalog number : 7471-088

Name : 5-[N-(1'-Phenylcyclohexyl)amino]pentanoic acid hydrochloride

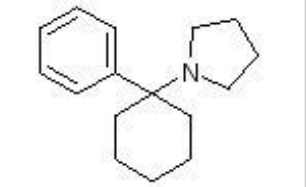
Mol. formula : $C_{17}H_{26}ClNO_2$ **FW :** 311.86 **DEA schedule :** 0



Catalog number : 7458-001 **CASRN :** 2201-39-0

Name : 1-(1-Phenylcyclohexyl)pyrrolidine hydrochloride; PCPy; Rolicyclidine

Mol. formula : $C_{16}H_{24}ClN$ **FW :** 265.83 **DEA schedule :** 1

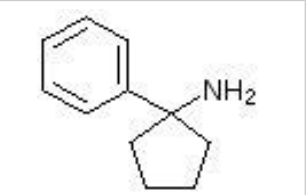


References : Brine, GA*; et al. J Heterocyclic Chem* **1979**, *16*, 1425.
Budd, RD *N Engl J Med* **1980**, *303*, 588.

Catalog number : 7460-012 **CASRN :** 17380-74-4

Name : 1-Phenylcyclopentylamine hydrochloride; PPA hydrochloride

Mol. formula : $C_{11}H_{16}ClN$ **FW :** 197.71 **DEA schedule :** 1

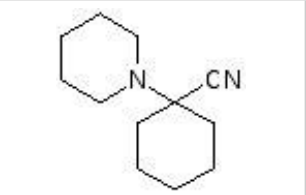


References : Blake, PA; Yamaguchi, S; Thurkauf, A; Rogawski, MA *Epilepsia* **1992**, *33*, 188-94.

Catalog number : 8603-001

Name : 1-Piperidinocyclohexanecarbonitrile

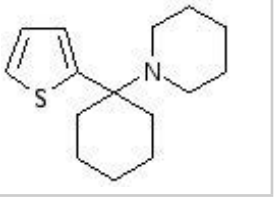
Mol. formula : $C_{12}H_{20}N_2$ **FW :** 192.31 **DEA schedule :** 1



Catalog number : 7470-001 **CASRN :** 1867-65-8

Name : 1-[1-(2-Thienyl)cyclohexyl]piperidine hydrochloride; TCP hydrochloride

Mol. formula : $C_{15}H_{24}ClNS$ **FW :** 285.88 **DEA schedule :** 1

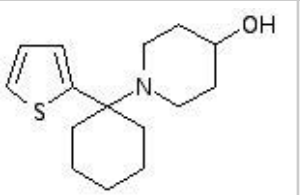


References : Brine, GA*; et al. J Heterocyclic Chem* **1979**, *16*, 1425.
Vignon, J; *et al. Brain Res* **1983**, *280*, 194-7.

Catalog number : 7470-002

Name : 1-[1-(2-Thienyl)cyclohexyl]-4-hydroxypiperidine

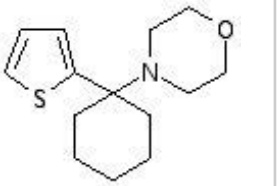
Mol. formula : $C_{15}H_{23}NOS$ **FW :** 265.42 **DEA schedule :** 1



Catalog number : 7471-013

Name : 1-[1-(2-Thienyl)cyclohexyl]morpholine hydrochloride

Mol. formula : $C_{14}H_{22}ClNOS$ **FW :** 287.85 **DEA schedule :** 1

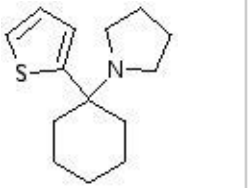


References : Brine, GA*; et al. J Heterocyclic Chem* **1979**, *16*, 1425.

Catalog number : 7473-015

Name : 1-[1-(2-Thienyl)cyclohexyl]pyrrolidine hydrochloride

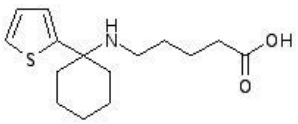
Mol. formula : $C_{14}H_{22}ClNS$ **FW :** 271.86 **DEA schedule :** 1



Catalog number : 7470-003

Name : 5-[N-[1'-(2-Thienyl)cyclohexyl]amino]pentanoic acid hydrochloride

Mol. formula : $C_{15}H_{24}ClNO_2S$ **FW :** 317.88 **DEA schedule :** 0



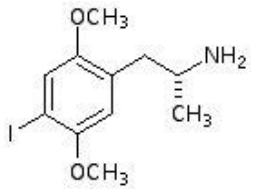
NIH
National Institute
on Drug Abuse

Hallucinogens: Amphetamine Class

Catalog number : 7396-011 **CASRN :** 82864-06-0

Name : (-)-2,5-Dimethoxy-4-iodoamphetamine hydrochloride

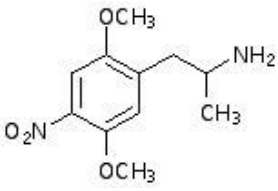
Mol. formula : $C_{11}H_{17}ClINO_2$ **FW :** 357.62 **DEA schedule :** 0



Catalog number : 7396-009

Name : (±)-2,5-Dimethoxy-4-nitroamphetamine hydrochloride

Mol. formula : $C_{11}H_{17}ClN_2O_4$ **FW :** 276.75 **DEA schedule :** 0

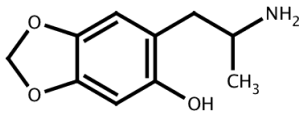


Catalog number : 7402-002 **CASRN :** 145284-65-7

Name : (±)-6-Hydroxy-3,4-methylenedioxyamphetamine hydrochloride

Mol. formula : $C_{10}H_{14}ClNO_3$ **FW :** 238.89 **DEA schedule :** 1

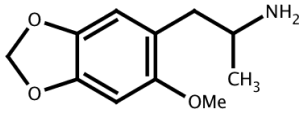
Notes : *CNS stimulant*



Catalog number : 7401-001

Name : (±)-2-Methoxy-4,5-methylenedioxyamphetamine hydrochloride

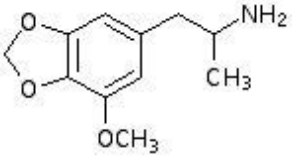
Mol. formula : $C_{11}H_{16}ClNO_3$ **FW :** 245.71 **DEA schedule :** 1



Catalog number : 7401-003

Name : (±)-3-Methoxy-4,5-methylenedioxyamphetamine hydrochloride

Mol. formula : $C_{11}H_{16}ClNO_3$ **FW :** 245.71 **DEA schedule :** 1

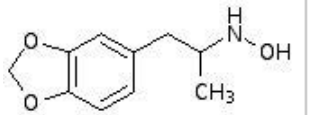


Catalog number : 7402-001 **CASRN :** 4764-17-4

Name : (±)-N-Hydroxy-3,4-methylenedioxyamphetamine hydrochloride

Mol. formula : $C_{10}H_{14}ClNO_3$ **FW :** 231.68 **DEA schedule :** 1

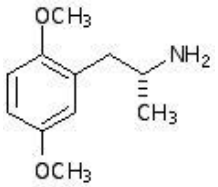
Notes : *CNS stimulant*



Catalog number : 7396-002

Name : (-)-2,5-Dimethoxyamphetamine hydrochloride; (-)-DMA

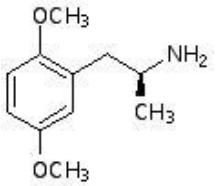
Mol. formula : $C_{11}H_{18}ClNO_2$ **FW :** 231.72 **DEA schedule :** 1



Catalog number : 7396-003

Name : (+)-2,5-Dimethoxyamphetamine hydrochloride; (+)-DMA

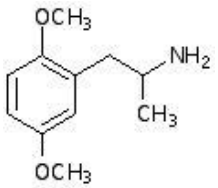
Mol. formula : $C_{11}H_{18}ClNO_2$ **FW :** 231.72 **DEA schedule :** 1



Catalog number : 7396-001

Name : (±)-2,5-Dimethoxyamphetamine hydrochloride; (±)-DMA

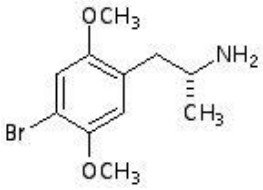
Mol. formula : $C_{11}H_{18}ClNO_2$ **FW :** 231.72 **DEA schedule :** 1



Catalog number : 7391-003

Name : (-)-4-Bromo-2,5-dimethoxyamphetamine hydrochloride; (-)-DOB

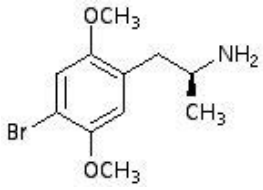
Mol. formula : $C_{11}H_{17}BrClNO_2$ **FW :** 310.62 **DEA schedule :** 1



Catalog number : 7391-002

Name : (+)-4-Bromo-2,5-dimethoxyamphetamine hydrochloride; (+)-DOB

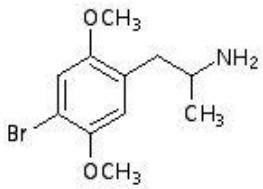
Mol. formula : $C_{11}H_{17}BrClNO_2$ **FW :** 310.62 **DEA schedule :** 1



Catalog number : 7391-001

Name : (±)-4-Bromo-2,5-dimethoxyamphetamine hydrochloride; (±)-DOB

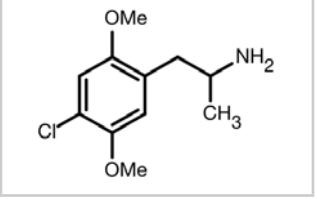
Mol. formula : $C_{11}H_{17}BrClNO_2$ **FW :** 310.62 **DEA schedule :** 1



Catalog number : 7391-004 **CASRN :** 123431-31-2

Name : (±)-4-Chloro-2,5-dimethoxyamphetamine hydrochloride; (±)-DOC

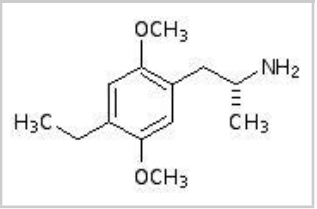
Mol. formula : $C_{11}H_{16}ClNO_2 \bullet HCl$ **FW :** 266.1663 **DEA schedule :** 1



Catalog number : 7399-007

Name : (-)-2,5-Dimethoxy-4-ethylamphetamine hydrochloride; (-)-DOET

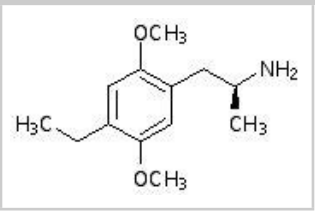
Mol. formula : $C_{13}H_{22}ClNO_2$ **FW :** 259.78 **DEA schedule :** 1



Catalog number : 7399-005

Name : (+)-2,5-Dimethoxy-4-ethylamphetamine hydrochloride; (+)-DOET

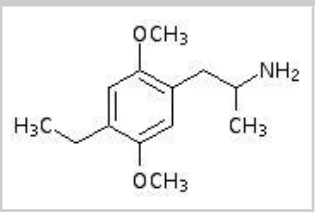
Mol. formula : $C_{13}H_{22}ClNO_2$ **FW :** 259.78 **DEA schedule :** 1



Catalog number : 7399-004

Name : (±)-2,5-Dimethoxy-4-ethylamphetamine hydrochloride; (±)-DOET

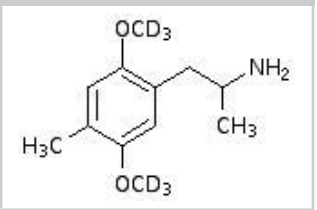
Mol. formula : $C_{13}H_{22}ClNO_2$ **FW :** 259.78 **DEA schedule :** 1



Catalog number : 7395-004

Name : [OC^2H_3]-2,5-Dimethoxy-4-methylamphetamine HCl; [OC^2H_3]DOM

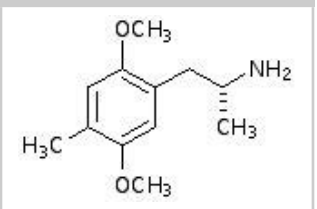
Mol. formula : $C_{12}H_{20}ClNO_2$ **FW :** 251.78 **DEA schedule :** 1



Catalog number : 7395-002 **CASRN :** 15588-95-1

Name : (-)-2,5-Dimethoxy-4-methylamphetamine hydrochloride; (-)-DOM

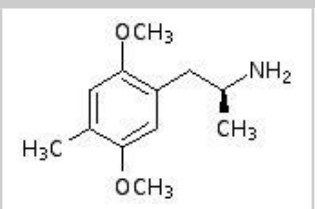
Mol. formula : $C_{12}H_{20}ClNO_2$ **FW :** 245.75 **DEA schedule :** 1



Catalog number : 7395-003

Name : (+)-2,5-Dimethoxy-4-methylamphetamine hydrochloride; (+)-DOM

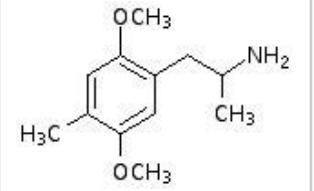
Mol. formula : $C_{12}H_{20}ClNO_2$ **FW :** 245.75 **DEA schedule :** 1



Catalog number : 7395-001 **CASRN :** 15588-95-1

Name : (±)-2,5-Dimethoxy-4-methylamphetamine hydrochloride; (±)-DOM

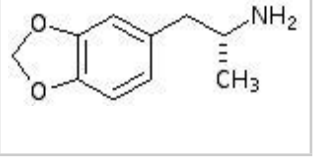
Mol. formula : $C_{12}H_{20}ClNO_2$ **FW :** 245.75 **DEA schedule :** 1



Catalog number : 7400-003 **CASRN :** 61614-60-6

Name : (-)-3,4-Methylenedioxyamphetamine hydrochloride; (-)-MDA HCl

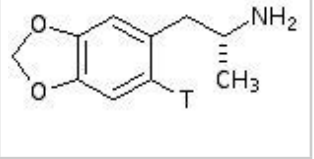
Mol. formula : $C_{10}H_{14}ClNO_2$ **FW :** 215.68 **DEA schedule :** 1



Catalog number : 7400-006 **CASRN :** 6292-91-7

Name : (-)-[6'-$^3H_2$(n)]-3',4'-Methylenedioxyamphetamine hydrochloride; (-)-[6'-$^3H_2$(n)]MDA

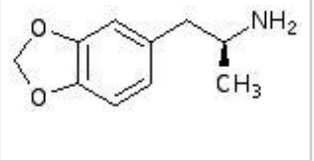
Mol. formula : $C_{10}H_{14}ClNO_2$ **FW :** 217.68 **DEA schedule :** 1



Catalog number : 7400-002 **CASRN :** 64057-70-1

Name : (+)-3,4-Methylenedioxyamphetamine hydrochloride; (+)-MDA HCl

Mol. formula : $C_{10}H_{14}ClNO_2$ **FW :** 215.68 **DEA schedule :** 1

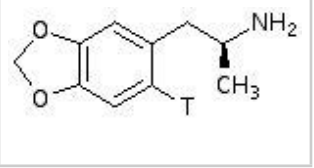


Catalog number : 7400-004

Name : (+)-[6'-^{3}H(n)-3',4'-Methylenedioxyamphetamine hydrochloride; (+)-[6'-^{3}H(n)MDA

Mol. formula : $C_{10}H_{14}ClNO_2$ **FW :** 215.68 **DEA schedule :** 1

Notes : *Hallucinogen (tritium-labeled).*

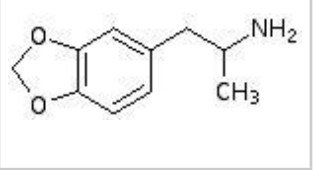


Catalog number : 7400-001 **CASRN :** 6292-91-7

Name : (±)-3,4-Methylenedioxyamphetamine hydrochloride; MDA HCl

Mol. formula : $C_{10}H_{14}ClNO_2$ **FW :** 215.68 **DEA schedule :** 1

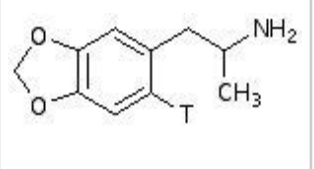
References : *Merck Index*, 14th ed., Monograph 5765.



Catalog number : 7400-005

Name : [6-$^3H_2$(n)]-3,4-Methylenedioxyamphetamine hydrochloride; [6-$^3H_2$(n)]MDA

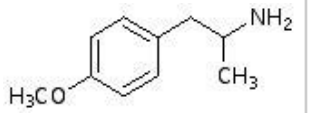
Mol. formula : $C_{10}H_{14}ClNO_2$ **FW :** 217.68 **DEA schedule :** 1



Catalog number : 7411-001 **CASRN :** 3706-26-1

Name : (±)-4-Methoxyamphetamine hydrochloride

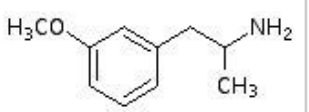
Mol. formula : $C_{10}H_{16}ClNO$ **FW :** 201.70 **DEA schedule :** 1



Catalog number : 7411-010 **CASRN :** 17862-85-0

Name : (±)-3-Methoxyamphetamine hydrochloride

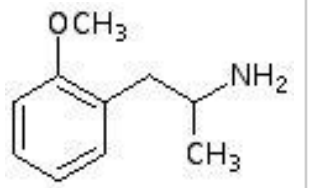
Mol. formula : $C_{10}H_{16}ClNO$ **FW :** 201.70 **DEA schedule :** 1



Catalog number : 7411-011 **CASRN :** 15402-84-3

Name : (±)-2-Methoxyamphetamine hydrochloride; NDMP

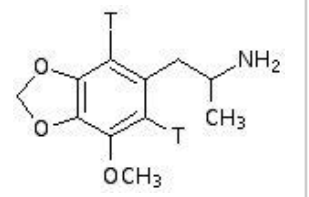
Mol. formula : $C_{10}H_{16}ClNO$ **FW :** 201.70 **DEA schedule :** 1



Catalog number : 7401-002

Name : [2',6'-^{3}H(n)]-3-Methoxy-4,5-methylenedioxyamphetamine hydrochloride; [2,6-^{3}H(n)]MMDA

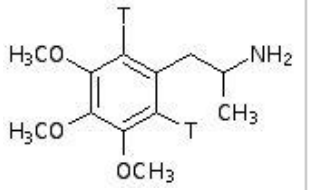
Mol. formula : $C_{11}H_{16}ClNO_3$ **FW :** 249.72 **DEA schedule :** 1



Catalog number : 7390-002

Name : (±)-[2,6-$^{3}H_2$(n)]-3,4,5-Trimethoxyamphetamine hydrochloride

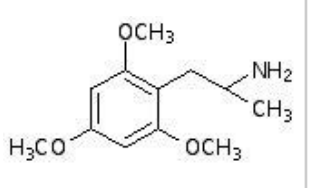
Mol. formula : $C_{12}H_{20}ClNO_3$ **FW :** 265.76 **DEA schedule :** 1



Catalog number : 7390-003

Name : (±)-2,4,6-Trimethoxyamphetamine hydrochloride

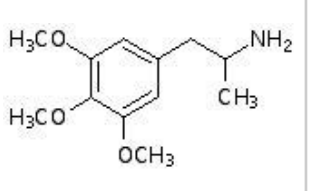
Mol. formula : $C_{12}H_{20}ClNO_3$ **FW :** 261.47 **DEA schedule :** 1



Catalog number : 7390-001 **CASRN :** 5688-80-2

Name : (±)-3,4,5-Trimethoxyamphetamine hydrochloride; TMA

Mol. formula : $C_{12}H_{20}ClNO_3$ **FW :** 261.47 **DEA schedule :** 1

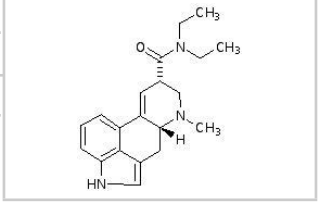


Hallucinogens: Ergot alkaloids

Catalog number : 7315-014 **CASRN :** 2126-78-5

Name : (+)-Isolysergic acid diethylamide

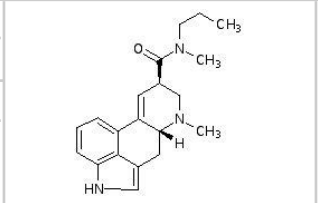
Mol. formula : $C_{20}H_{25}N_3O$ **FW :** 323.20 **DEA schedule :** 1



Catalog number : 7315-013 **CASRN :** 101692-69-7

Name : (+)-Lysergic acid methyl-*n*-propylamide tartrate; LAMPA

Mol. formula : $(C_{20}H_{25}N_3O)_2$ **FW :** 796.33 **DEA schedule :** 1

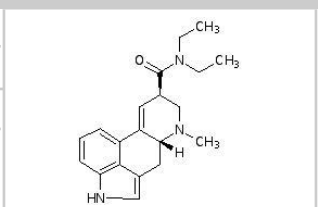


Catalog number : 7315-004 **CASRN :** 17676-08-3

Name : (+)-Lysergic acid diethylamide (+)-tartrate (2:1); (+)-LSD (+)-tartrate

Mol. formula : $(C_{20}H_{25}N_3O)_2$ **FW :** 796.93 **DEA schedule :** 1

References : *Merck Index*, 14th ed., Monograph 5634.

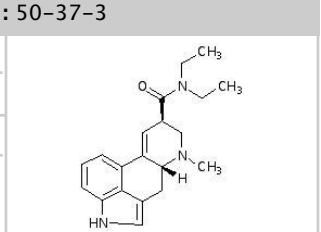


Catalog number : 7315-008 **CASRN :** 50-37-3

Name : (+)-Lysergic acid diethylamide; (+)-LSD

Mol. formula : $C_{20}H_{25}N_3O$ **FW :** 323.42 **DEA schedule :** 1

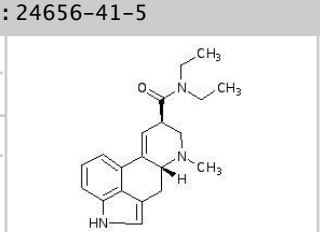
References : *Merck Index*, 14th ed., Monograph 5634.



Catalog number : 7315-009 **CASRN :** 24656-41-5

Name : (+)-Lysergic acid diethylamide hydrogen maleate

Mol. formula : $C_{20}H_{25}N_3O$ **FW :** 439.49 **DEA schedule :** 1



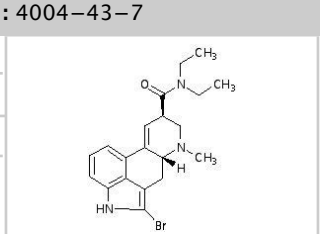
Catalog number : 7315-010 **CASRN :** 4004-43-7

Name : (+)-2-Bromo-LSD (+)-hydrogen tartrate; BOL-148

Mol. formula : $C_{20}H_{24}BrN_3O$ **FW :** 552.44 **DEA schedule :** 1

Notes : *Serotonin antagonist without the hallucinogenic activity of LSD*

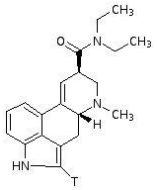
References : *Merck Index*, 14th ed., Monograph 1423.



Catalog number : 7315-007 **CASRN :** 377756-22-4

Name : [2-^{3}H]-(+)-Lysergic acid diethylamide; (+)-[3H]-LSD

Mol. formula : $C_{20}H_{25}N_3O$ **FW :** 323.42 **DEA schedule :** 1

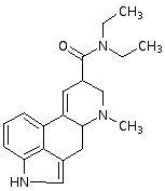


Catalog number : 7315-006 **CASRN :** 51064-36-9

Name : (±)-Lysergic acid diethylamide; (±)-LSD

Mol. formula : $C_{20}H_{25}N_3O$ **FW :** 323.42 **DEA schedule :** 1

References : *Merck Index*, 14th ed., Monograph 5634.

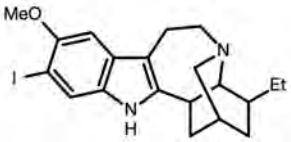


Hallucinogens: Ibogaine Class

Catalog number : 7260-003

Name : 11-Iodoibogaine

Mol. formula : $C_{20}H_{25}IN_2O$ **FW :** 436.33 **DEA schedule :** 1

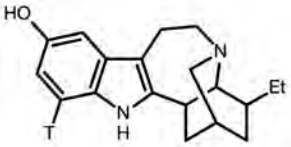


Catalog number : 7260-005

Name : [12-^{3}H]-Noribogaine

Mol. formula : $C_{19}H_{24}N_2O$ **FW :** 296.41 **DEA schedule :** 0

Notes : *Ibogaine-like effect without tremors (tritium-labeled).*

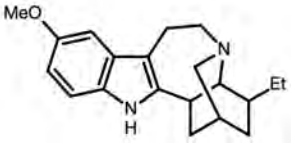


Catalog number : 7260-001 **CASRN :** 36415-61-9

Name : Ibogaine hydrochloride

Mol. formula : $C_{20}H_{27}ClN_2O$ **FW :** 346.89 **DEA schedule :** 1

References : *Merck Index*, 14th ed., Monograph 4875.

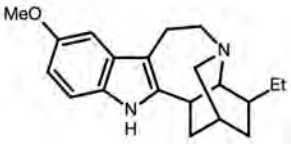


Catalog number : 7260-002 **CASRN :** 146560-35-2

Name : Tritium-labeled Ibogaine; [12-^{3}H]Ibogaine

Mol. formula : $C_{20}H_{26}N_2O$ **FW :** 312.44 **DEA schedule :** 1

Notes : *Hallucinogen (tritium-labeled).*



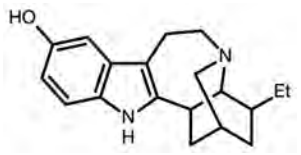
Catalog number : 7260-006 **CASRN :** 481-88-9

Name : Noribogaine

Mol. formula : $C_{19}H_{24}N_2O$ **FW :** 292.42 **DEA schedule :** 0

Notes : *Ibogaine-like effect without tremors*

References : Glick, SD; Pearl, SM; Cai, J; Maisonneuve, IM *Brain Res* **1996**, *713*, 294-7.

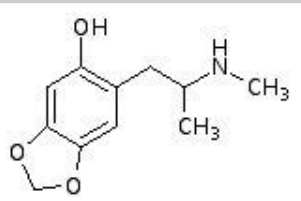


Hallucinogens: Methamphetamine Class

Catalog number : 7401-004

Name : (±)-6-Hydroxy-3,4-methylenedioxymethamphetamine fumarate

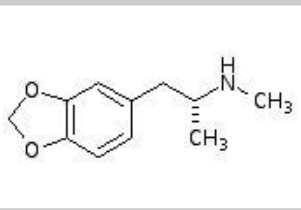
Mol. formula : $C_{26}H_{34}N_2O_{10}$ **FW :** 534.56 **DEA schedule :** 1



Catalog number : 7405-003 **CASRN :** 69558-31-2

Name : (-)-3,4-Methylenedioxymethamphetamine hydrochloride; (-)-MDMA

Mol. formula : $C_{11}H_{16}ClNO_2$ **FW :** 229.71 **DEA schedule :** 1

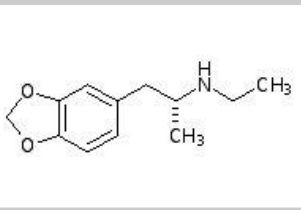


Catalog number : 7404-003 **CASRN :** 82801-81-8

Name : (-)-N-Ethyl-3,4-methylenedioxyamphetamine hydrochloride

Mol. formula : $C_{12}H_{18}ClNO_2$ **FW :** 243.73 **DEA schedule :** 1

Notes : *CNS stimulant*

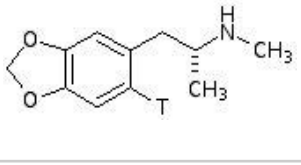


Catalog number : 7405-005 **CASRN :** 4764-17-4

Name : (-)-[6'-^{3}H(n)]-3',4'-Methylenedioxymethamphetamine hydrochloride; (-)-[^{3}H]MDMA

Mol. formula : $C_{11}H_{16}ClNO_2$ **FW :** 231.71 **DEA schedule :** 1

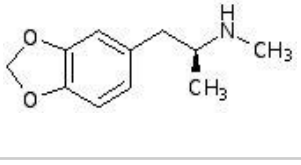
Notes : *CNS stimulant; hallucinogen (tritium-labeled).*



Catalog number : 7405-002 **CASRN :** 69558-32-3

Name : (+)-3,4-Methylenedioxymethamphetamine hydrochloride; (+)-MDMA

Mol. formula : $C_{11}H_{16}ClNO_2$ **FW :** 229.71 **DEA schedule :** 1

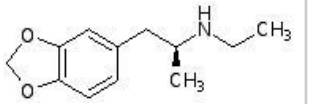


Catalog number : 7404-002 **CASRN :** 82801-81-8

Name : (+)-N-Ethyl-3,4-methylenedioxyamphetamine hydrochloride

Mol. formula : $C_{12}H_{18}ClNO_2$ **FW :** 243.73 **DEA schedule :** 1

Notes : *CNS stimulant*

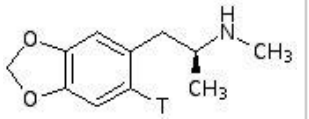


Catalog number : 7405-006

Name : (+)-[6'-^{3}H(n)]-3',4'-Methylenedioxymethamphetamine hydrochloride; (+)-[^{3}H]MDMA

Mol. formula : $C_{11}H_{16}ClNO_2$ **FW :** 231.71 **DEA schedule :** 1

Notes : *CNS stimulant; hallucinogen (tritium-labeled).*

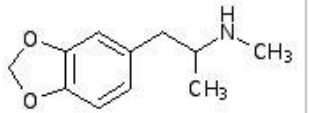


Catalog number : 7405-001 **CASRN :** 64057-70-1

Name : (±)-3,4-Methylenedioxymethamphetamine hydrochloride; MDMA

Mol. formula : $C_{11}H_{16}ClNO_2$ **FW :** 229.71 **DEA schedule :** 1

References : *Merck Index*, 14th ed., Monograph 5767.

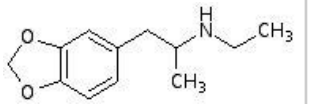


Catalog number : 7404-001 **CASRN :** 82801-81-8

Name : (±)-N-Ethyl-3,4-methylenedioxyamphetamine hydrochloride

Mol. formula : $C_{12}H_{18}ClNO_2$ **FW :** 243.73 **DEA schedule :** 1

Notes : *CNS stimulant*

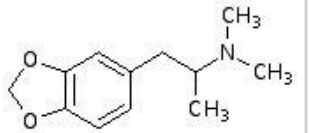


Catalog number : 7404-004

Name : (±)-N,N-Dimethyl-3,4-methylenedioxyamphetamine hydrochloride

Mol. formula : $C_{12}H_{18}ClNO_2$ **FW :** 243.73 **DEA schedule :** 1

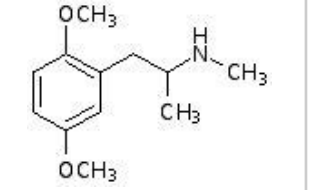
Notes : *CNS stimulant*



Catalog number : 7395-005

Name : (±)-2,5-Dimethoxymethamphetamine hydrochloride

Mol. formula : $C_{12}H_{20}ClNO_2$ **FW :** 245.75 **DEA schedule :** 1

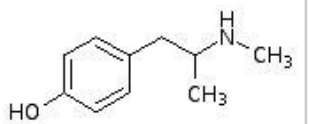


Catalog number : 7411-012 **CASRN :** 370-14-9

Name : (±)-4-Hydroxymethamphetamine hydrochloride; Pholedrine

Mol. formula : $C_{10}H_{16}ClNO$ **FW :** 201.70 **DEA schedule :** 2

References : *Merck Index*, 14th ed., Monograph 4810.

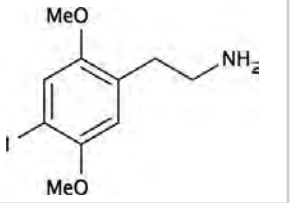


Hallucinogens: Phenethylamine Class

Catalog number : 7518-001 **CASRN :** 69587-11-7 (base)

Name : 2,5-Dimethoxy-4-iodo-β-phenethylamine hydrochloride; 2C-I

Mol. formula : $C_{10}H_{15}ClINO_2$ **FW :** 343.59 **DEA schedule :** 1

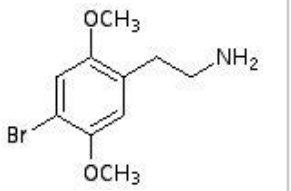


Catalog number : 7392-012 **CASRN :** 56281-37-9

Name : 4-Bromo-2,5-dimethoxy-β-phenethylamine hydrochloride; 2C-B

Mol. formula : $C_{10}H_{15}BrClNO_2$ **FW :** 296.59 **DEA schedule :** 1

References : *Merck Index*, 14th ed., Monograph 1908.

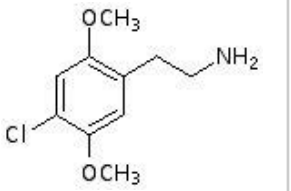


Catalog number : 7519-001 **CASRN :** 88441-14-9

Name : 4-Chloro-2,5-dimethoxy-β-phenethylamine hydrochloride; 2C-C

Mol. formula : $C_{10}H_{15}Cl_2NO_2$ **FW :** 252.14 **DEA schedule :** 0

References : Jacob, P., 3rd; Shulgin AT *NIDA Res Monogr* **1994**, *146*, 74-91.

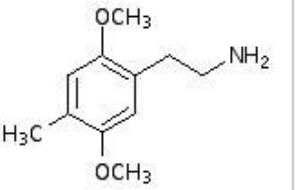


Catalog number : 7508-001 **CASRN :** 25505-65-1

Name : 2,5-Dimethoxy-4-methyl-β-phenethylamine hydrochloride; 2C-D

Mol. formula : $C_{11}H_{18}ClNO_2$ **FW :** 231.72 **DEA schedule :** 0

References : Jacob, P., 3rd; Shulgin AT *NIDA Res Monogr* **1994**, *146*, 74-91.

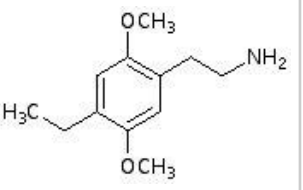


Catalog number : 7509-001 **CASRN :** 71539-34-9

Name : 2,5-Dimethoxy-4-ethyl-β-phenethylamine hydrochloride; 2C-E

Mol. formula : $C_{12}H_{20}ClNO_2$ **FW :** 245.75 **DEA schedule :** 0

References : Jacob, P., 3rd; Shulgin AT *NIDA Res Monogr* **1994**, *146*, 74-91.

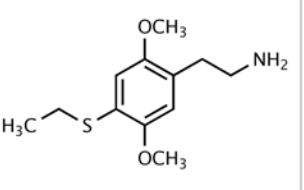


Catalog number : 7385-001 **CASRN :** 207740-24-7 (base)

Name : 2,5-Dimethoxy-4-ethylthio-β-phenethylamine hydrochloride; 2C-T-2

Mol. formula : $C_{12}H_{20}ClNO_2S$ **FW :** 277.81 **DEA schedule :** 0

References : Fantegrossi, WE; *et al. Psychopharmacology (Berl)* **2005**, *181*, 496-503.

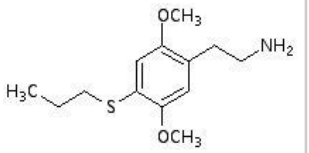


Catalog number : 7348-001 **CASRN :** 207740-26-9

Name : 2,5-Dimethoxy-4-*n*-propylthio-β-phenethylamine hydrochloride; 2C-T-7

Mol. formula : $C_{13}H_{22}ClNO_2S$ **FW :** 291.84 **DEA schedule :** 1

References : Fantegrossi, WE; *et al. Psychopharmacology (Berl)* **2005**, *181*, 496-503.

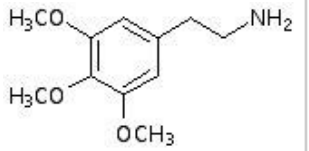


Catalog number : 7381-001 **CASRN :** 832-92-8

Name : Mescaline hydrochloride

Mol. formula : $C_{11}H_{18}ClNO_3$ **FW :** 247.72 **DEA schedule :** 1

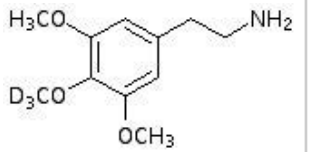
References : *Merck Index*, 14th ed., Monograph 5905.



Catalog number : 7381-002

Name : [4'-OC^2H_3]Mescaline hydrochloride

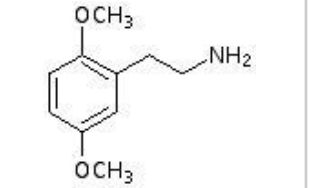
Mol. formula : $C_{11}H_{18}ClNO_3$ **FW :** 247.72 **DEA schedule :** 1



Catalog number : 7381-011 **CASRN :** 3166-74-3

Name : 2,5-Dimethoxy-β-phenethylamine hydrochloride

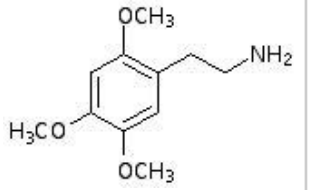
Mol. formula : $C_{10}H_{16}ClNO_2$ **FW :** 217.70 **DEA schedule :** 0



Catalog number : 7381-010 **CASRN :** 15394-83-9

Name : 2,4,5-Trimethoxy-β-phenethylamine hydrochloride

Mol. formula : $C_{11}H_{18}ClNO_3$ **FW :** 247.72 **DEA schedule :** 1



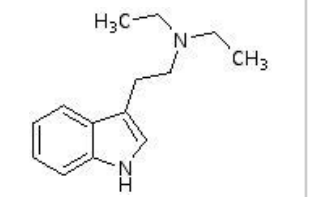
Hallucinogens: Tryptamine Class

Catalog number : 7434-001 **CASRN :** 20671-78-7

Name : N,N-Diethyltryptamine fumarate; DET fumarate

Mol. formula : $C_{18}H_{24}N_2O_4$ **FW :** 332.40 **DEA schedule :** 1

References : Heinze, WJ; Schlemmer, RF; Tyler, CB; Davis, JM *Biol Psychiatry* **1983**, *18*, 829-36.

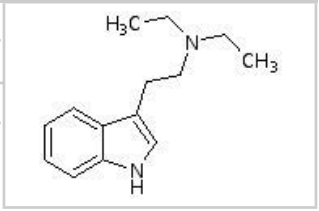


Catalog number : 7434-002 **CASRN :** 61-51-8

Name : N,N-Diethyltryptamine (base); DET

Mol. formula : $C_{14}H_{20}N_2$ **FW :** 216.33 **DEA schedule :** 1

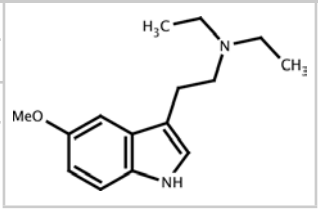
References : Heinze, WJ; Schlemmer, RF, Jr; Tyler, CB; Davis JM *Biol Psychiatry* **1983**, *18*, 829-36.



Catalog number : 7525-000

Name : 5-Methoxy-N,N-diethyltryptamine, 5-MeO-DET

Mol. formula : $C_{15}H_{22}N_2O$ **FW :** 246.35 **DEA schedule :** 1

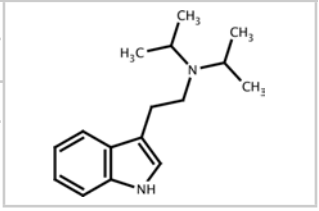


Catalog number : 7522-000 **CASRN :** 14780-24-6

Name : N,N-Diisopropyltryptamine hydrochloride, DiPT

Mol. formula : $C_{16}H_{24}N_2$ **FW :** 244.38 **DEA schedule :** 1

References : Fumiko N, Ryouich N, Kanak S, Hisashi K, *Eur J Pharmacol*, **2007**, *559* (2-3), 132-137.



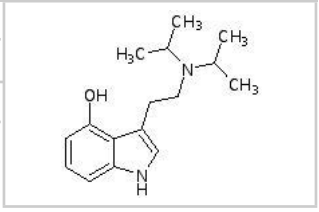
Catalog number : 7516-000 **CASRN :** 63065-90-7

Name : 4-Hydroxy-N,N-diisopropyltryptamine hydrochloride; 4-OH-DiPT

Mol. formula : $C_{16}H_{25}ClN_2O$ **FW :** 296.84 **DEA schedule :** 0

Notes : *Psylocibin analog.*

References : Pichini, S; et al., *J Pharm Biomed Analysis* **2008**, *47*, 335-342.

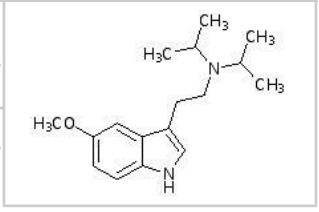


Catalog number : 7439-001 **CASRN :** 4021-34-5

Name : 5-Methoxy-N,N-diisopropyltryptamine hydrochloride; 5-MeO-DiPT; FOXY

Mol. formula : $C_{17}H_{27}ClN_2O$ **FW :** 310.87 **DEA schedule :** 1

References : Shulgin, AT; Carter MF *Commun Psychopharmacol* **1980**, *4*, 363-9.

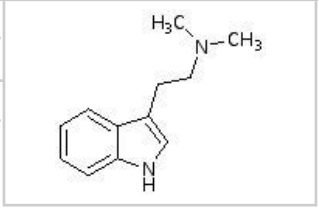


Catalog number : 7435-001 **CASRN :** 69321-46-6

Name : N,N-Dimethyltryptamine fumarate; DMT fumarate

Mol. formula : $C_{16}H_{20}N_2O_4$ **FW :** 304.35 **DEA schedule :** 1

References : Barker, SA; Monti, JA; Christian, ST *Int Rev Neurobiol* **1981**, *22*, 83-110.

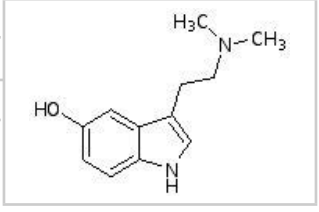


Catalog number : 7433-001 **CASRN :** 487-93-4

Name : Bufotenine (base); 5-Hydroxy-N,N-dimethyltryptamine; 5-OH-DMT

Mol. formula : $C_{12}H_{16}N_2O$ **FW :** 204.26 **DEA schedule :** 1

References : Emanuele, E; et al., *Neuro Endocrinol Lett* **2010**, *31*, 117-21.

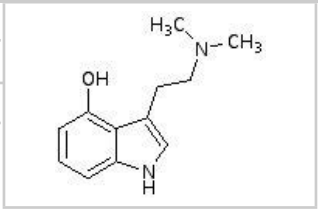


Catalog number : 7438-001 **CASRN :** 520-53-6

Name : Psilocin

Mol. formula : $C_{12}H_{16}N_2O$ **FW :** 204.27 **DEA schedule :** 1

References : *Merck Index*, 14th ed., Monograph 7925.

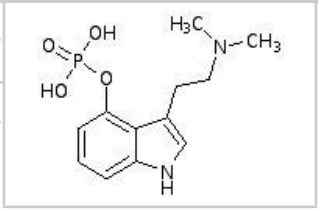


Catalog number : 7437-001 **CASRN :** 520-52-5

Name : Psilocybin

Mol. formula : $C_{12}H_{17}N_2O_4$ **FW :** 284.25 **DEA schedule :** 1

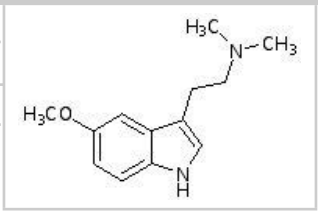
References : *Merck Index*, 14th ed., Monograph 7926.



Catalog number : 7431-001 **CASRN :** 1019-45-0

Name : 5-Methoxy-N,N-dimethyltryptamine (base); 5-MeO-DMT

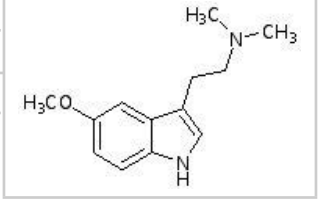
Mol. formula : $C_{13}H_{18}N_2O$ **FW :** 218.29 **DEA schedule :** 1



Catalog number : 7431-002 **CASRN :** 1019-45-0

Name : 5-Methoxy-N,N-dimethyltryptamine fumarate; 5-MeO-DMT fumarate

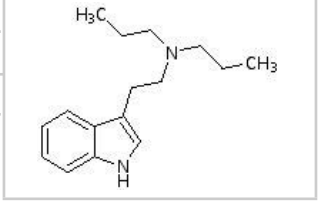
Mol. formula : $C_{30}H_{40}N_4O_6$ **FW :** 552.67 **DEA schedule :** 1



Catalog number : 7436-001 **CASRN :** 7558-73-8

Name : N,N-Dipropyltryptamine hydrochloride

Mol. formula : $C_{16}H_{25}ClN_2$ **FW :** 280.84 **DEA schedule :** 0

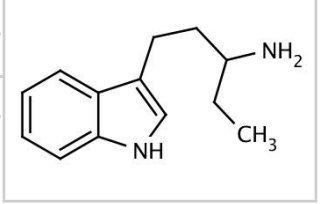


Catalog number : 7249-001 **CASRN :** 2235-90-7

Name : α-Ethyltryptamine acetate; AET

Mol. formula : $C_{14}H_{20}N_2O_2$ **FW :** 248.33 **DEA schedule :** 1

References : *Merck Index*, 13th ed., Monograph 3924.

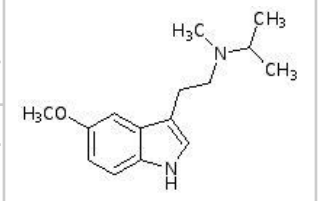


Catalog number : NOCD-001 **CASRN :** 96096-54-7

Name : 5-Methoxy-N-isopropyl-N-methyltryptamine hydrochloride; 5-MeO-MiPT

Mol. formula : $C_{15}H_{22}N_2O \bullet HCl$ **FW :** 282.81 **DEA schedule :** 1

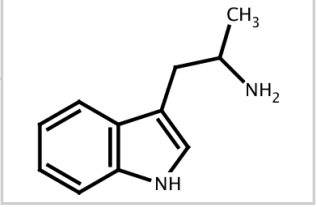
References : Repke, DB; Grotjahn DB; Shulgin AT, *J Med Chem* **1985**, *28*, 892-6; Nagai, F; *et al., Eur J Pharmacol* **2007**, *559*(2-3), 132-137.



Catalog number : 7432-001 **CASRN :** 299-26-3

Name : α-Methyltryptamine; AMT

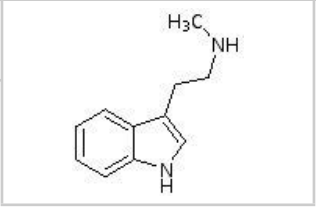
Mol. formula : $C_{11}H_{14}N_2$ **FW :** 174.24 **DEA schedule :** 1



Catalog number : 7435-002 **CASRN :** 61-49-4

Name : N-Methyltryptamine fumarate

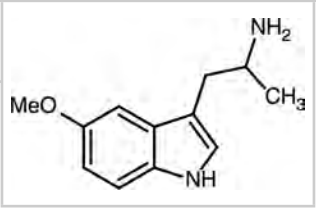
Mol. formula : $C_{15}H_{18}N_2O_4$ **FW :** 290.31 **DEA schedule :** 0



Catalog number : 7506-001 **CASRN :** 1137-04-8

Name : 5-Methoxy-α-methyltryptamine; 5-MeO-AMT

Mol. formula : $C_{12}H_{16}N_2O$ **FW :** 204.27 **DEA schedule :** 0



References : Jacob, P; Shulgin AT *NIDA Res Monogr* **1994**, *146*, 74-91.

Nicotinics: Anabaseine Class

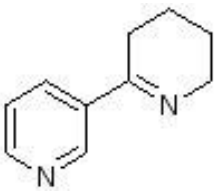
Catalog number : NICT-011 **CASRN :** 3471-05-4

Name : Anabaseine dihydrochloride

Mol. formula : $C_{10}H_{14}Cl_2N_2$ **FW :** 233.14 **DEA schedule :** 0

Notes : *Nicotinic α7 receptor agonist.*

References : Wheeler, JW; *et al. Science* **1981**, *211*, 1051-1052.
Kem WR; Mahnir VM; Papke RL; Lingle CJ *J Pharmacol Exp Ther* **1997**, *283*, 979-92.



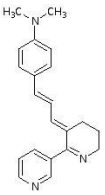
Catalog number : NICT-012

Name : (*E,E*)-3-(4'-Dimethylaminocinnamylidine)anabaseine dihydrochloride; DMAC

Mol. formula : $C_{21}H_{25}Cl_2N_3$ **FW :** 390.36 **DEA schedule :** 0

Notes : *Selective α7 nicotinic acetylcholine receptor agonist.*

References : de Fiebre, C; *et al. Mol Pharmacol* **1995**, *47*, 164-171.



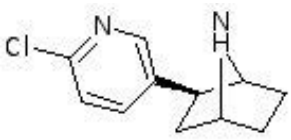
Nicotinics: Epibatidine Class

Catalog number : NICT-002 **CASRN :** 152378-30-8

Name : (-)-Epibatidine hydrochloride

Mol. formula : $C_{11}H_{14}Cl_2N_2$ **FW :** 245.15 **DEA schedule :** 0

References : Qian C; Li T; Shen TY; Libertine-Garahan L; Eckman J; Biftu T; Ip S *Eur J Pharmacol* **1993**, *250*, R13-4.
Badio B; Daly JW *Mol Pharmacol* **1994**, *45*, 563-9.



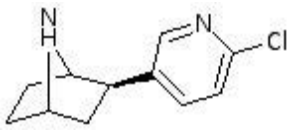
Catalog number : NICT-003 **CASRN :** 140111-52-0

Name : (+)-Epibatidine hydrochloride

Mol. formula : $C_{11}H_{14}Cl_2N_2$ **FW :** 245.15 **DEA schedule :** 0

Notes : *Epibatidine natural isomer.*

References : Qian C; Li T; Shen TY; Libertine-Garahan L; Eckman J; Biftu T; Ip S *Eur J Pharmacol* **1993**, *250*, R13-4.
Badio B; Daly JW *Mol Pharmacol* **1994**, *45*, 563-9.



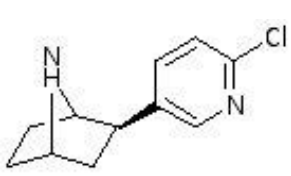
Catalog number : NICT-001

Name : (±)-Epibatidine hydrochloride

Mol. formula : $C_{11}H_{14}Cl_2N_2$ **FW :** 245.15 **DEA schedule :** 0

Notes : *Potent nicotinic receptor agonist and non-opioid analgesic.*

References : Sullivan, JP; *et al. J Pharmacol Exp Ther* **1994**, *271*, 624-31.



Nicotinics: Mecamylamine Class

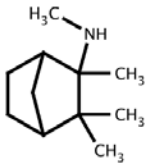
Catalog number : NICT-004 **CASRN :** 826-39-1

Name : (±)-Mecamylamine HCl

Mol. formula : $C_{11}H_{22}ClN$ **FW :** 203.75 **DEA schedule :** 0

Notes : *Non-competitive nicotinic acetylcholine receptor antagonist.*

References : Sanberg, PR; *et al. Int J Neurosci* **2001**, *109*, 81-90.



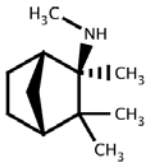
Catalog number : NOCD-123 **CASRN :** 107596-31-6

Name : (-)-(*R*)-Mecamylamine HCl

Mol. formula : $C_{11}H_{22}ClN$ **FW :** 203.75 **DEA schedule :** 0

Notes : *Non-competitive nicotinic acetylcholine receptor antagonist.*

References : Suchocki, JA, *Journal of Medicinal Chemistry* **1991**, *34*(3), 1003-10.
Schoenenberger, B, *Helvetica Chimica Acta* **1986**, *69*(2), 283-7.



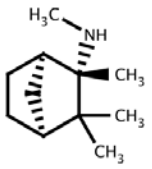
Catalog number : NICT-018 **CASRN :** 107596-30-5

Name : (+)-(*S*)-Mecamylamine HCl

Mol. formula : $C_{11}H_{22}ClN$ **FW :** 203.75 **DEA schedule :** 0

Notes : *Non-competitive nicotinic acetylcholine receptor antagonist.*

References : Stone, CA; *et al.*, *J. Med. Chem.*, **34**, 1003 (1991).



Nicotinics: Miscellaneous

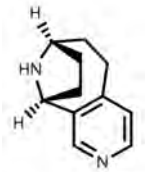
Catalog number : NOCD-142 new **CASRN :** 895518-77-1

Name : (+)-PHT dihydrochloride

Mol. formula : $C_{11}H_{16}Cl_2N_2$ **FW :** 247.17 **DEA schedule :** 0

Notes : *Conformationally rigid nicotine analog.*

References : Kanne, D. B.; Ashworth, D. J.; Cheng, M. T.: Mutter, L. C.;
Abood, L. G. *J . Am. Chem. Soc.* **1986**, *108*, 7864.
Carroll FI, Hu X, Navarro HA, Deschamps J, Abdrakhmanova GR, Damaj MI, Martin BR *J. Med. Chem.* **2006**, *49*, 3244.



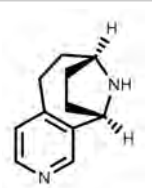
Catalog number : NOCD-122 **CASRN :** 895518-76-0

Name : (-)-PHT dihydrochloride

Mol. formula : $C_{11}H_{16}Cl_2N_2$ **FW :** 247.17 **DEA schedule :** 0

Notes : *Conformationally rigid nicotine analog.*

References : Kanne, D. B.; Ashworth, D. J.; Cheng, M. T.: Mutter, L. C.;
Abood, L. G. *J . Am. Chem. Soc.* **1986**, *108*, 7864.
Carroll FI, Hu X, Navarro HA, Deschamps J, Abdrakhmanova GR, Damaj MI, Martin BR *J. Med. Chem.* **2006**, *49*, 3244.



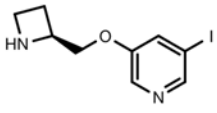
Catalog number : NICT-019 **CASRN :** 1217837-17-6

Name : 5-I-A85380

Mol. formula : $C_9H_{11}IN_2O \bullet 2\ HCl$ **FW :** 363.02 **DEA schedule :** 0

Notes : *α4β2-selective nAChR ligand*

References : Koren, *et al., J Med Chem* **1998**, *41*, 3690. Muhkin, *et al., Mol Pharmacol* **2000**, *57*, 642.

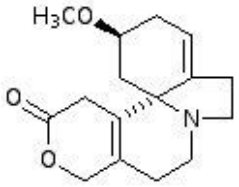


Catalog number : NICT-006 **CASRN :** 29734-68-7

Name : Dihydro-β-erythroidine hydrobromide

Mol. formula : $C_{16}H_{22}BrNO_3$ **FW :** 356.26 **DEA schedule :** 0

References : *Merck Index*, 14th ed., Monograph 3175.



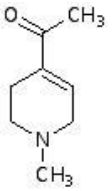
Catalog number : NICT-005 **CASRN :** 100752-88-3

Name : Isoarecolone hydrochloride

Mol. formula : $C_8H_{14}ClNO$ **FW :** 175.66 **DEA schedule :** 0

Notes : *Nicotinic receptor agonist.*

References : Mirza, NR; *et al. Eur J Pharmacol* **1996**, *295*, 207-10.
Shoaib, M *Psychopharmacology (Berl)* **2006**, *188*, 252-7.



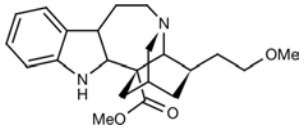
Catalog number : NOCD-012 **CASRN :** 308123-60-6

Name : 18-Methoxycoronaridine; 18-MC

Mol. formula : $C_{22}H_{30}N_2O_3$ **FW :** 370.49 **DEA schedule :** 0

Notes : *Selective α3β4 nicotinic antagonist.*

References : Glick, SD; *et al. Brain Res* **1996**, *719*, 29-35.



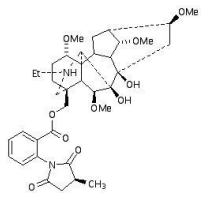
Catalog number : NICT-007 **CASRN :** 21019-30-7

Name : Methyllycaconitine citrate; MLA

Mol. formula : $C_{43}H_{58}N_2O_{17}$ **FW :** 928.98 **DEA schedule :** 0

Notes : *Nicotinic receptor antagonist.*

References : Ward, JM; *et al. FEBS Lett* **1990**, *270*, 45-8.
Alkondon, M; *et al. Mol Pharmacol* **1992**, *41*, 802-8.



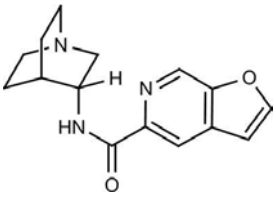
Catalog number : NOCD-013 **CASRN :** 478149-53-0

Name : PHA-543613

Mol. formula : $C_{15}H_{19}Cl_2N_3O_2$ **FW :** 344.24 **DEA schedule :** 0

Notes : *α7 nicotinic acetylcholine receptor agonist*

References : Wishka, DG; *et al. J Med Chem 2006, 49, 4425-36.*



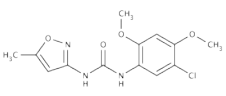
Catalog number : NICT-017 **CASRN :** 501925-31-1

Name : PNU-120596

Mol. formula : $C_{13}H_{14}ClN_3O_4$ **FW :** 311.72

Notes : *Positive allosteric modulator of the α_7 neuronal nicotinic acetylcholine receptor.*

References : Hurst, RS; *et al.* J Neurosci **2005**, *25*, 4396-405.



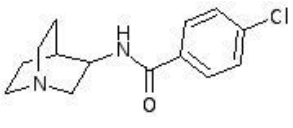
Catalog number : NICT-016 **CASRN :** 123464-89-1

Name : PNU-282987

Mol. formula : $C_{14}H_{10}Cl_2N_{20}$ **FW :** 310.21 **DEA schedule :** 0

Notes : *Selective α7 nicotinic acetylcholine receptor agonist.*

References : Hajos, M; *et al. J Pharmacol Exp Ther* **2005**, *312*, 1213-22.



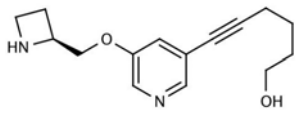
Catalog number : MEDD-031 **CASRN :** 820231-95-6

Name : Sazetidine hydrochloride

Mol. formula : $C_{15}H_{22}ClN_2O_2$ **FW :** 333.26 **DEA schedule :** 0

Notes : *Selective $\alpha_4\beta_2$ nicotinic receptor agonist.*

References : Xiao, et al., *Mol Pharmacol, **2006,** 70*, 1454. Zwart, et al., *Mol Pharmacol*, **2008,** 73 1843.



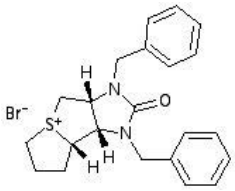
Catalog number : NICT-013

Name : Trimethaphan bromide

Mol. formula : $C_{22}H_{25}BrN_2OS$ **FW :** 445.43 **DEA schedule :** 0

Notes : *Nicotinic antagonist; antihypertensive.*

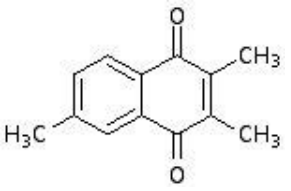
References : *Merck Index*, 14th ed., Monograph 9707.



Catalog number : NICT-014

Name : 2,3,6-Trimethyl-1,4-napthoquinone

Mol. formula : $C_{13}H_{12}O_2$ **FW :** 200.24 **DEA schedule :** 0



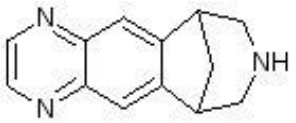
Catalog number : NOCD-046 **CASRN :** 249296-44-4

Name : Varenicline dihydrochloride

Mol. formula : $C_{13}H_{15}Cl_2N_3$ **FW :** 288.685 **DEA schedule :** 0

Notes : *α4β2 nicotinic receptor partial agonist.*

References : Coe, JW; *et al. J Med Chem* **2005**, *48*, 3474-7.

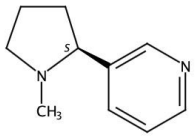


Nicotinics: Nicotine Class

Catalog number : NICT-020 new **CASRN :** 65-31-6

Name : (-)-Nicotine ditartrate

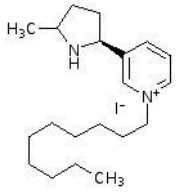
Mol. formula : $C_{18}H_{26}N_2O_{12}$ **FW :** 462.41 **DEA schedule :** 0



Catalog number : NICT-009

Name : (-)-N-Decylnicotinium iodide (-)-di-*p*-toluoyl-L-tartrate; NDNI

Mol. formula : $C_{40}H_{53}IN_2O_8$ **FW :** 816.77 **DEA schedule :** 0

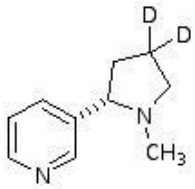


Catalog number : NICT-015 **CASRN :** 121949-85-7

Name : (-)-Nicotine-4,4-d_2 (-)-*di*-*p*-toluoyl-L-tartrate

Mol. formula : $C_{30}H_{32}N_2O_8$ **FW :** 550.60 **DEA schedule :** 0

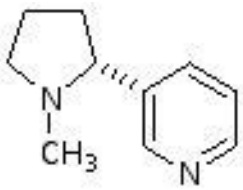
References : Jacob, PJ *Labelled Comp Radiopharm* **1988**, *25*, 1117-28.



Catalog number : NICT-008 **CASRN :** 163804-20-4

Name : (+)-Nicotine (+)-di-*p*-toluoyl-D-tartrate

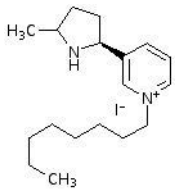
Mol. formula : $C_{30}H_{32}N_2O_8$ **FW :** 548.58 **DEA schedule :** 0



Catalog number : NICT-010

Name : (-)-N-Octylnicotinium iodide (-)-di-*p*-toluoyl-L-tartrate; NONI

Mol. formula : $C_{38}H_{49}IN_2O_8$ **FW :** 788.72 **DEA schedule :** 0



NIH
National Institute
on Drug Abuse

Opioids: Benzodiazole Class

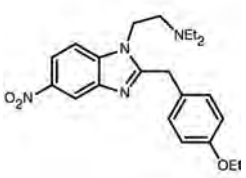
Catalog number : 9624-002

Name : Etonitazene

Mol. formula : $C_{22}H_{28}N_4O_3$ **FW :** 396.48 **DEA schedule :** 1

Notes : *Narcotic analgesic; potent μ opiate receptor agonist*

References : *Merck Index*, 14th ed., Monograph 3883.



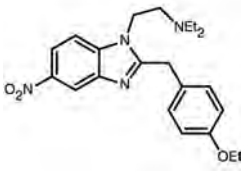
Catalog number : 9624-001 **CASRN :** 911-65-9

Name : Etonitazene hydrochloride

Mol. formula : $C_{22}H_{29}ClN_4O_3$ **FW :** 432.95 **DEA schedule :** 1

Notes : *Narcotic analgesic; potent μ opiate receptor agonist*

References : *Merck Index*, 14th ed., Monograph 3883.



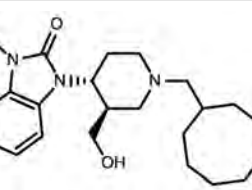
Catalog number : NOCD-057 **CASRN :** 361343-48-8

Name : (+)-J-113397

Mol. formula : $C_{24}H_{38}ClN_3O_2$ **FW :** 454.05 **DEA schedule :** 0

Notes : *Nociceptin/orphanin FQ (NOP) receptor antagonist.*

References : Kawamoto H; *et al. Tetrahedron* **2001**, *57*, 981-986.
Kawamoto H; *et al. J Med Chem* **1999**, *42*, 5061-3.



Opioids: Caged

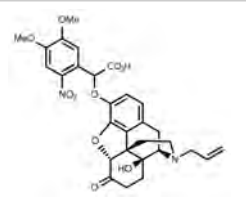
Catalog number : 9652-071 new **CASRN :** n/a

Name : CNV-NLX

Mol. formula : $C_{29}H_{30}N_2O_{10}$ **FW :** 566.56

Notes : *"Caged" opioid antagonist.*

References : M. R. Banghart, J. T. Williams, R. C. Shah, L. D. Lavis, B. L. Sabatini, Mol Pharmacol. 84, 687-695 (2013); M. R. Bruchas, B. L. Roth, Trends in Pharmacological Sciences. 37, 279-289 (2016).



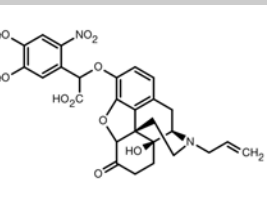
Catalog number : MPSP-120

Name : (Carboxynitroveratryl)naloxone; CNV-NLX

Mol. formula : $C_{29}H_{30}N_2O_{10}$ **FW :** 566.47 **DEA schedule :** 0

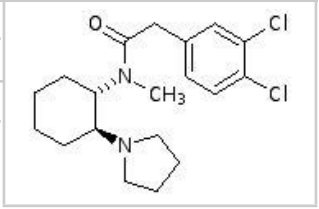
Notes : *Photoactivatable analog of naloxone.*

References : Banghart, MR; et al., *Mol Pharmacol* **2013**, *84*, 687-95.



Opioids: Cyclohexyldiamine Class

Catalog number : NOCD-064 **CASRN :** 67198-13-4



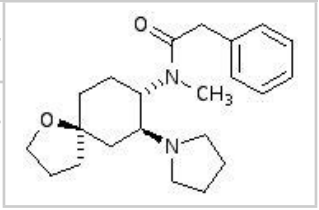
Name : U50,488H

Mol. formula : $C_{20}H_{30}Cl_2N_2O_4S$ **FW :** 465.44 **DEA schedule :** 0

Notes : *Kappa-opioid receptor agonist.*

References : Vonvoigtlander, PF; *et al. J Pharmacol Exp Ther* **1983**, *224*, 7-12.
Negus, SS; *et al. J Pharmacol Exp Ther* **1997**, *282*, 44-55.
Taylor, CC; *et al. J Pharmacol Exp Ther* **1997**, *280*, 416-21.

Catalog number : NOCD-065 **CASRN :** 96744-75-1



Name : U69,593

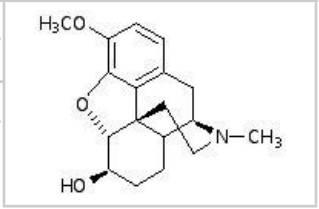
Mol. formula : $C_{22}H_{32}N_2O_2$ **FW :** 356.51 **DEA schedule :** 0

Notes : *Selective κ-opioid agonist.*

References : Lahti, RA; *et al. Eur J Pharmacol* **1985**, *109*, 281-4.
Puig-Ramos, A; *et al. Behav Neurosci* **2008**, *122*, 151-60.

Opioids: Dihydromorphine Class

Catalog number : 9120-002

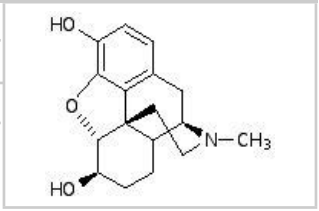


Name : Dihydroisocodeine

Mol. formula : $C_{18}H_{23}NO_3$ **FW :** 301.39 **DEA schedule :** 2

References : *Merck Index*, 14th ed., Monograph 3176.

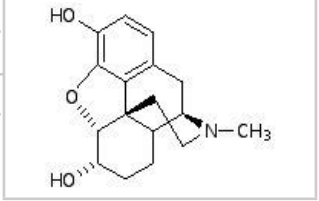
Catalog number : 9145-002



Name : Dihydroisomorphine

Mol. formula : $C_{17}H_{21}NO_3$ **FW :** 287.36 **DEA schedule :** 1

Catalog number : 9145-001 **CASRN :** 509-60-4



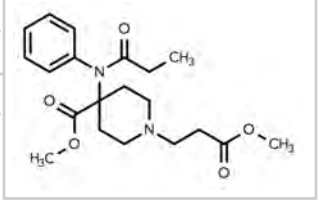
Name : Dihydromorphine

Mol. formula : $C_{17}H_{21}NO_3$ **FW :** 287.36 **DEA schedule :** 1

References : *Merck Index*, 14th ed., Monograph 3177.

Opioids: Fentanyl Class

Catalog number : 9739-001 new **CASRN :** 132539-07-2



Name : Remifentanil hydrochloride

Mol. formula : $C_{20}H_{29}ClN_2O_5$ **FW :** 412.91 **DEA schedule :** 2

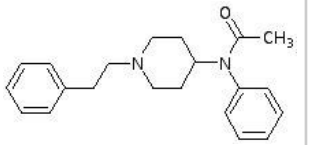
Notes : *Short-acting fentanyl analog.*

Catalog number : 9821-001 **CASRN :** 117332-89-5

Name : Acetylfentanyl hydrochloride

Mol. formula : $C_{21}H_{27}ClN_2O$ **FW :** 358.91 **DEA schedule :** 2

References : Brine, GA*; et al. J Heterocyclic Chem* **1989**, *26*, 677.



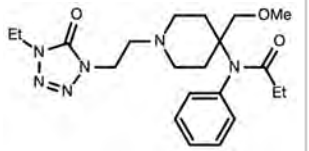
Catalog number : 9737-001 **CASRN :** 69049-06-5

Name : Alfentanil hydrochloride

Mol. formula : $C_{21}H_{33}ClN_6O_3$ **FW :** 452.98 **DEA schedule :** 2

Notes : *Analgesic, μ-Opioid agonist*

References : *Merck Index*, 14th ed., Monograph 236.

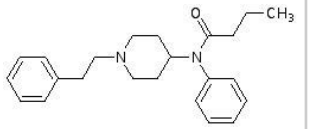


Catalog number : 9822-001 **CASRN :** 1443-52-3

Name : Butyrylfentanyl hydrochloride

Mol. formula : $C_{23}H_{31}ClN_2O$ **FW :** 386.97 **DEA schedule :** 1

References : Brine, GA*; et al. J Heterocyclic Chem* **1989**, *26*, 677.

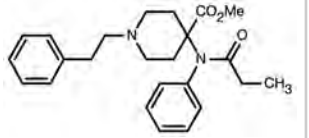


Catalog number : 9743-001 **CASRN :** 59708-52-0 (parent)

Name : Carfentanil hydrochloride

Mol. formula : $C_{24}H_{31}ClN_2O_3$ **FW :** 430.98 **DEA schedule :** 2

Notes : *Analgesic, μ-Opioid agonist.*
(see footnotes 1 & 2 in Section C)



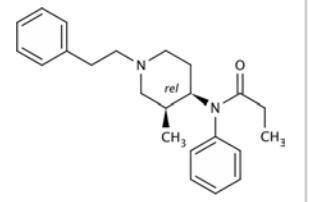
Catalog number : 9813-001 **CASRN :** 42045-86-3

Name : (±)-*cis*-3-Methylfentanyl hydrochloride

Mol. formula : $C_{23}H_{31}ClN_2O$ **FW :** 386.96 **DEA schedule :** 1

Notes : *Analgesic, μ-Opioid agonist*

References : Brine, GA*; et al. J Heterocyclic Chem* **1989**, *26*, 677.



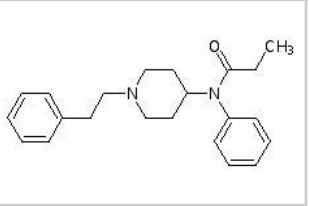
Catalog number : 9801-001 **CASRN :** 1443-54-5

Name : Fentanyl hydrochloride

Mol. formula : $C_{22}H_{29}ClN_2O$ **FW :** 372.92 **DEA schedule :** 2

Notes : *Analgesic, μ-Opioid agonist*

References : *Merck Index*, 14th ed., Monograph 4001.
Brine, GA*; et al. J Heterocyclic Chem* **1989**, *26*, 677.



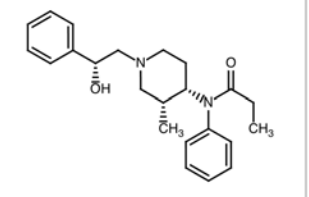
Catalog number : 9831-003 **CASRN :** 155168-97-1

Name : (-)-(β*R*,3*R*,4*S*)-β-Hydroxy-3-methylfentanyl oxalate

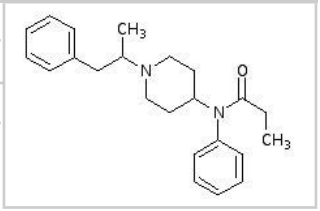
Mol. formula : $C_{25}H_{32}N_2O_6$ **FW :** 456.55 **DEA schedule :** 1

Notes : *Analgesic, μ-Opioid agonist*

References : Brine, GA*; et al. J Med Chem* **1995**, *38*, 1547-57.



Catalog number : 9814-001 **CASRN :** 79704-88-4



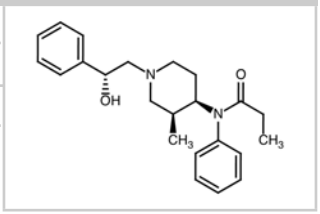
Name : α-Methylfentanyl hydrochloride

Mol. formula : $C_{23}H_{31}ClN_2O$ **FW :** 386.97 **DEA schedule :** 1

Notes : *Analgesic, μ-Opioid agonist*

References : Ayres, WA; *et al. J Psychoactive Drugs* **1981**, *13*, 91-3.
Kram, TC; *et al. Anal Chem* **1981**, *53*, 1379A-1386A.
Brine, GA*; et al. J Heterocyclic Chem* **1989**, *26*, 677.

Catalog number : 9831-004 **CASRN :** 143553-99-5



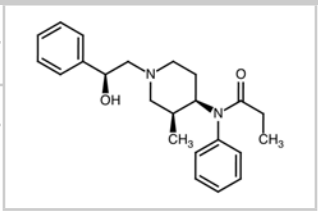
Name : (-)-(β*R*,3*S*,4*R*)-β-Hydroxy-3-methylfentanyl hydrochloride

Mol. formula : $C_{23}H_{31}ClN_2O_2$ **FW :** 402.97 **DEA schedule :** 1

Notes : *Analgesic, μ-Opioid agonist*

References : Brine, GA*; et al. J Med Chem* **1995**, *38*, 1547-57.

Catalog number : 9831-005 **CASRN :** 155169-00-9



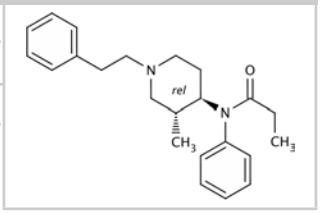
Name : (+)-(β*S*,3*S*,4*R*)-β-Hydroxy-3-methylfentanyl oxalate

Mol. formula : $C_{25}H_{32}N_2O_6$ **FW :** 456.55 **DEA schedule :** 1

Notes : *Analgesic, μ-Opioid agonist*

References : Brine, GA*; et al. J Med Chem* **1995**, *38*, 1547-57.

Catalog number : 9813-002 **CASRN :** 42045-87-4

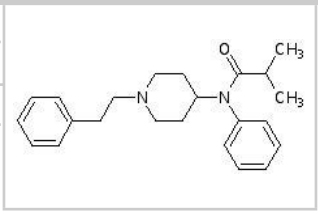


Name : (±)-*trans*-3-Methylfentanyl hydrochloride

Mol. formula : $C_{23}H_{31}ClN_2O$ **FW :** 386.96 **DEA schedule :** 1

Notes : *Analgesic, μ-Opioid agonist*

Catalog number : 9801-006 **CASRN :** 117332-90-8

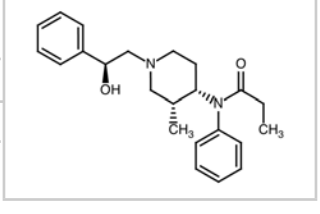


Name : Isopropylfentanyl hydrochloride

Mol. formula : $C_{23}H_{31}ClN_2O$ **FW :** 386.96 **DEA schedule :** 2

References : Brine, GA*; et al. J Heterocyclic Chem* **1989**, *26*, 677.

Catalog number : 9831-002 **CASRN :** 78995-14-9



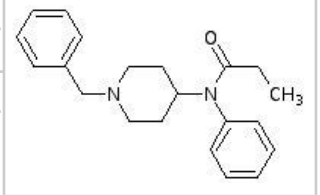
Name : (+)-(β*S*,3*R*,4*S*)-β-Hydroxy-3-methylfentanyl hydrochloride; Ohmefentanyl; F 7302

Mol. formula : $C_{23}H_{31}ClN_2O_2$ **FW :** 402.97 **DEA schedule :** 1

Notes : *Analgesic, μ-Opioid agonist*

References : Xu, H; Chen J; Chi, ZQ *Sci Sin [B]* **1985**, *28*, 504-11.
Brine, GA; *et al. J Med Chem* **1995**, *38*, 1547-57.

Catalog number : 9818-002 **CASRN :** 1474-02-8



Name : Benzylfentanyl hydrochloride

Mol. formula : $C_{21}H_{27}ClN_2O$ **FW :** 358.91 **DEA schedule :** 0

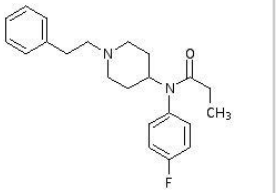
Notes : *Pharmacologically inert fentanyl analog.*

References : Brine, GA*; et al. J Heterocyclic Chem* **1989**, *26*, 677.
Federal Register **2010**, *75*(124), 37300.

Catalog number : 9812-001 **CASRN :** 90736-23-5

Name : p-Fluorofentanyl hydrochloride

Mol. formula : $C_{22}H_{28}ClFN_2O$ **FW :** 390.93 **DEA schedule :** 1



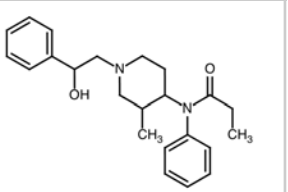
Catalog number : 9831-001 **CASRN :** 78995-14-9

Name : (±)-cis-β-Hydroxy-3-methylfentanyl hydrochloride

Mol. formula : $C_{23}H_{31}ClN_2O_2$ **FW :** 402.97 **DEA schedule :** 1

Notes : *μ-Opioid agonist*

References : Brine, GA*; et al. J Med Chem* **1995**, *38*, 1547-57.

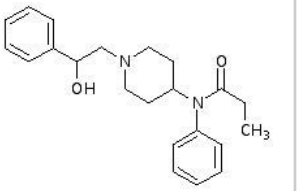


Catalog number : 9830-001 **CASRN :** 78995-10-5

Name : β-Hydroxyfentanyl hydrochloride

Mol. formula : $C_{22}H_{29}ClN_2O_2$ **FW :** 388.93 **DEA schedule :** 1

Notes : *μ-Opioid agonist*

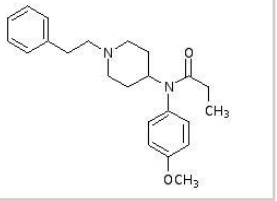


Catalog number : 9801-011 **CASRN :** 23609-41-8

Name : p-Anisoylfentanyl hydrochloride

Mol. formula : $C_{23}H_{31}ClN_2O_2$ **FW :** 402.97 **DEA schedule :** 2

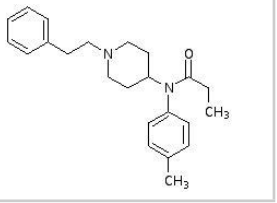
References : Brine, GA*; et al. J Heterocyclic Chem* **1989**, *26*, 677.



Catalog number : 9801-010 **CASRN :** 1807-12-1

Name : p-Tolylfentanyl hydrochloride

Mol. formula : $C_{23}H_{31}ClN_2O$ **FW :** 386.97 **DEA schedule :** 2



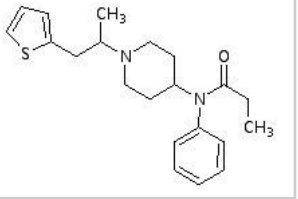
Catalog number : 9832-001 **CASRN :** 117332-94-2

Name : α-Methylthiofentanyl hydrochloride

Mol. formula : $C_{21}H_{29}ClN_2OS$ **FW :** 392.99 **DEA schedule :** 1

Notes : *μ-Opioid agonist*

References : Brine, GA*; et al. J Heterocyclic Chem* **1989**, *26*, 677.



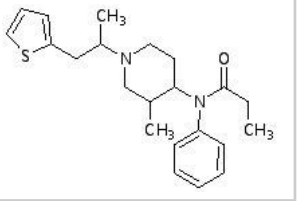
Catalog number : 9833-001 **CASRN :** n/a

Name : 3-Methylthiofentanyl hydrochloride

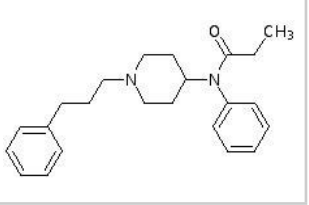
Mol. formula : $C_{21}H_{29}ClN_2OS$ **FW :** 392.99 **DEA schedule :** 1

Notes : *μ-Opioid agonist*

References : Brine, GA*; et al. J Heterocyclic Chem* **1989**, *26*, 677.



Catalog number : 9801-003 **CASRN :** 117332-88-4

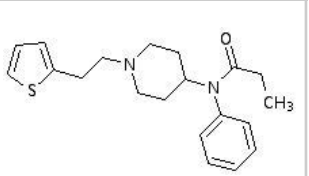


Name : N-[1-(3-Phenylpropyl)-4-piperidyl]-N-phenylpropanamide hydrochloride

Mol. formula : $C_{23}H_{31}ClN_2O$ **FW :** 386.96 **DEA schedule :** 2

References : Brine, GA*; et al. J Heterocyclic Chem* **1989**, *26*, 677.

Catalog number : 9835-001 **CASRN :** 79278-88-9



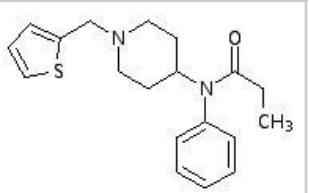
Name : Thiofentanyl hydrochloride

Mol. formula : $C_{20}H_{27}ClN_2OS$ **FW :** 378.97 **DEA schedule :** 1

Notes : *μ-Opioid agonist*

References : Brine, GA*; et al. J Heterocyclic Chem* **1989**, *26*, 677.

Catalog number : 9834-001 **CASRN :** 117332-93-1



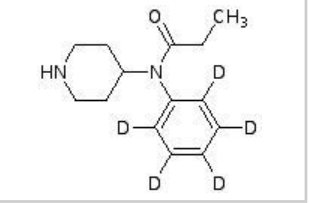
Name : Thenylfentanyl hydrochloride

Mol. formula : $C_{19}H_{25}ClN_2OS$ **FW :** 364.94 **DEA schedule :** 0

Notes : *Pharmacologically inert fentanyl analog.*

References : Brine, GA*; et al. J Heterocyclic Chem* **1989**, *26*, 677.
Federal Register **2010**, *75*(124), 37300.

Catalog number : 9801-008 **CASRN :** 1211527-23-9

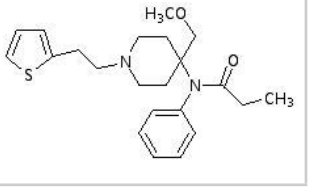


Name : [Phenyl-$^2H_5$]N-4-Piperidyl-N-phenylpropanamide

Mol. formula : $C_{14}H_{20}N_2O$ **FW :** 237.36 **DEA schedule :** 2

Notes : *Precursor for the synthesis of mass-labeled fentanyl analogs.*

Catalog number : 9740-001 **CASRN :** 60561-17-3



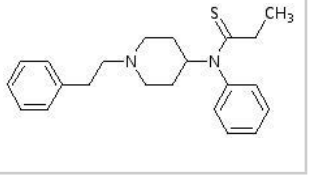
Name : Sufentanil citrate

Mol. formula : $C_{28}H_{38}N_2O_9S$ **FW :** 578.67 **DEA schedule :** 2

Notes : *Analgesic, μ-Opioid agonist*

References : *Merck Index*, 14th ed., Monograph 8887.
Brine, GA*; et al. J Heterocyclic Chem* **1989**, *26*, 677.

Catalog number : 9801-002 **CASRN :** 117332-87-3

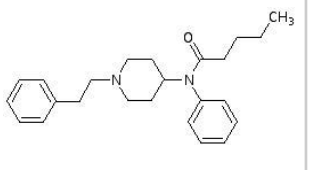


Name : N-[1-(2-Phenylethyl)-4-piperidyl]-N-phenylthiopropanamide hydrochloride

Mol. formula : $C_{22}H_{29}ClN_2S$ **FW :** 389.01 **DEA schedule :** 2

References : Brine, GA*; et al. J Heterocyclic Chem* **1989**, *26*, 677.

Catalog number : 9801-007 **CASRN :** 117332-91-9



Name : Valerylfentanyl hydrochloride

Mol. formula : $C_{24}H_{33}ClN_2O$ **FW :** 400.99 **DEA schedule :** 2

References : Brine, GA*; et al. J Heterocyclic Chem* **1989**, *26*, 677.

Opioids: Hydrocodone Class

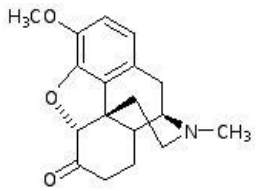
Catalog number : 9193-002 **CASRN :** 34195-34-1

Name : Dihydrocodeinone tartrate; hydrocodone bitartrate

Mol. formula : $C_{22}H_{27}NO_9$ **FW :** 449.46 **DEA schedule :** 2

Notes : *Narcotic analgesic; antitussive*

References : *Merck Index*, 14th ed., Monograph 4785.

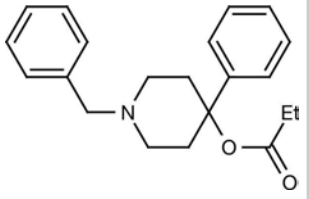


Opioids: Meperidine Class

Catalog number : 9661-002 **CASRN :** 63916-24-5

Name : 1-Benzyl-4-phenyl-4-propionoxypiperidine hydrochloride

Mol. formula : $C_{21}H_{26}ClNO_2$ **FW :** 359.90 **DEA schedule :** 0



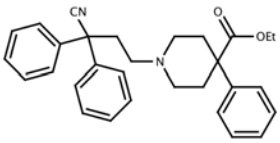
Catalog number : 9170-001 **CASRN :** 3810-80-8

Name : Diphenoxylate hydrochloride

Mol. formula : $C_{30}H_{33}ClN_2O_2$ **FW :** 489.04 **DEA schedule :** 2

Notes : *Antiperistaltic; antidiarrheal*

References : *Merck Index*, 14th ed., Monograph 3313.



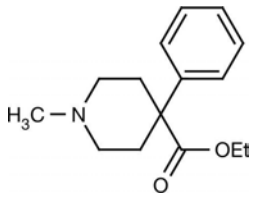
Catalog number : 9230-002 **CASRN :** 50-13-5

Name : Meperidine hydrochloride; Demerol hydrochloride

Mol. formula : $C_{15}H_{22}ClNO_2$ **FW :** 283.80 **DEA schedule :** 2

Notes : *Narcotic analgesic; sedative; anesthetic*

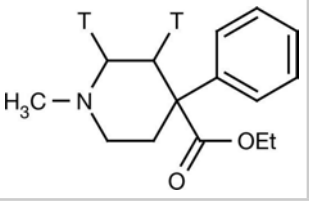
References : *Merck Index*, 14th ed., Monograph 5849.



Catalog number : 9230-003

Name : [2,3-$^3H_2$]Meperidine hydrochloride

Mol. formula : $C_{15}H_{22}ClNO_2$ **FW :** 287.81 **DEA schedule :** 2



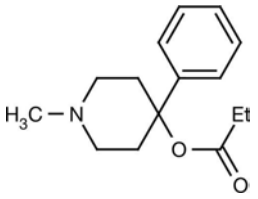
Catalog number : 9661-001 **CASRN :** 13147-09-6

Name : 1-Methyl-4-phenyl-4-propionoxypiperidine hydrochloride; Desmethylprodine; MPPP HCl

Mol. formula : $C_{15}H_{22}ClNO_2$ **FW :** 283.80 **DEA schedule :** 1

Notes : *μ-Opioid agonist; narcotic analgesic*

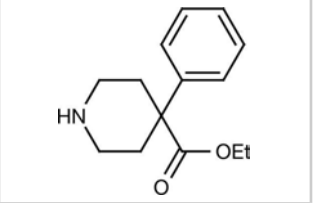
References : Johannessen, JN; Markey SP *Drug Alcohol Depend* **1984**, *13*, 367-74.



Catalog number : 9230-001 **CASRN :** 24465-45-0

Name : Normeperidine hydrochloride

Mol. formula : $C_{14}H_{20}ClNO_2$ **FW :** 269.77 **DEA schedule :** 0

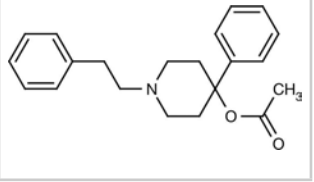


Catalog number : 9663-001 **CASRN :** 94-30-4

Name : 1-(2-Phenylethyl)-4-phenyl-4-acetoxypiperidine hydrochloride; PEPAP HCl

Mol. formula : $C_{21}H_{26}ClNO_2$ **FW :** 359.90 **DEA schedule :** 1

References : Pritzker, D; *et al. J Clin Psychopharmacol* **2002**, *22*, 330-2.

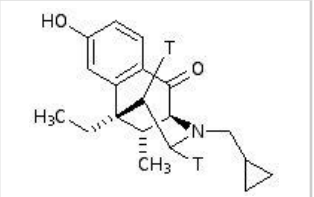


Opioids: Metazocine Class

Catalog number : 9240-003

Name : [11,12-$^3H_2$](-)-Ethylketazocine

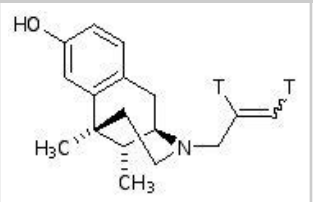
Mol. formula : $C_{19}H_{25}NO_2$ **FW :** 303.42 **DEA schedule :** 1



Catalog number : 9240-019

Name : (-)-[17,18-^{3}H]N-Allylnormetazocine

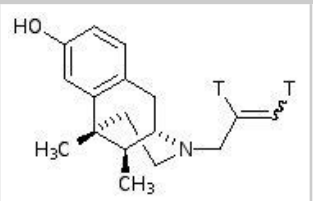
Mol. formula : $C_{17}H_{23}NO$ **FW :** 261.39 **DEA schedule :** 0



Catalog number : 9240-040

Name : (+)-[17,18-$^3H_2$]N-Allylnormetazocine

Mol. formula : $C_{17}H_{23}NO$ **FW :** 261.39 **DEA schedule :** 0



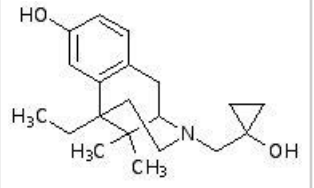
Catalog number : 9240-029 **CASRN :** 71990-00-6

Name : (±)-Bremazocine hydrochloride

Mol. formula : $C_{20}H_{30}ClNO_2$ **FW :** 351.92 **DEA schedule :** 0

Notes : *Kappa-opioid receptor standard ligand.*

References : Dortch-Carnes, J; Potter, DE *CNS Drug Rev* **2005**, *11*, 195-212.



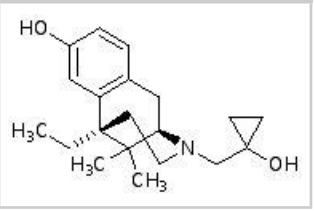
Catalog number : 9240-031 **CASRN :** 75684-07-0

Name : (-)-Bremazocine hydrochloride

Mol. formula : $C_{20}H_{30}ClNO_2$ **FW :** 351.92 **DEA schedule :** 0

Notes : *Kappa-opioid receptor standard ligand.*

References : Dortch-Carnes, J; Potter, DE *CNS Drug Rev* **2005**, *11*, 195-212.



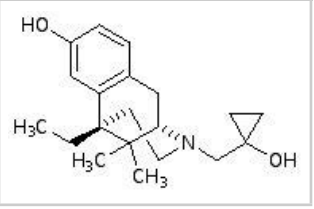
Catalog number : 9240-030

Name : (+)-Bremazocine hydrochloride

Mol. formula : $C_{20}H_{30}ClNO_2$ **FW :** 351.92 **DEA schedule :** 0

Notes : *Kappa-opioid receptor standard ligand.*

References : Dortch-Carnes, J; Potter, DE *CNS Drug Rev* **2005**, *11*, 195-212.

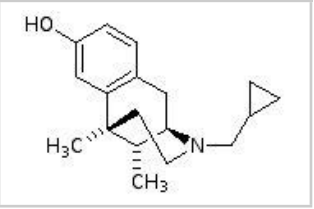


Catalog number : 9240-011

Name : (-)-Cyclazocine

Mol. formula : $C_{18}H_{25}NO$ **FW :** 271.39 **DEA schedule :** 0

Notes : *Narcotic antagonist*



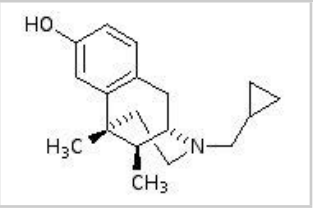
Catalog number : 9240-012

Name : (+)-Cyclazocine

Mol. formula : $C_{18}H_{25}NO$ **FW :** 271.39 **DEA schedule :** 0

Notes : *Narcotic antagonist*

References : Carroll, FI; *et al. J Med Chem* **1992**, *35*, 2812-8.



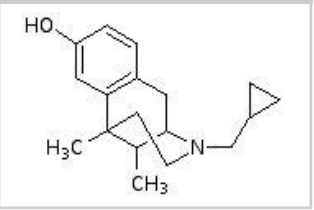
Catalog number : 9240-010 **CASRN :** 3572-80-3

Name : (±)-Cyclazocine

Mol. formula : $C_{18}H_{25}NO$ **FW :** 271.39 **DEA schedule :** 0

Notes : *Narcotic antagonist*

References : *Merck Index*, 14th ed., Monograph 2705.
Carroll, FI; *et al. J Med Chem* **1992**, *35*, 2812-8.

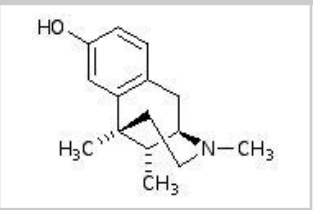


Catalog number : 9240-008 **CASRN :** 133005-39-7

Name : (-)-Metazocine fumarate

Mol. formula : $C_{34}H_{46}N_2O_6$ **FW :** 578.75 **DEA schedule :** 2

References : Carroll, FI; *et al. J Med Chem* **1992**, *35*, 2812-8.

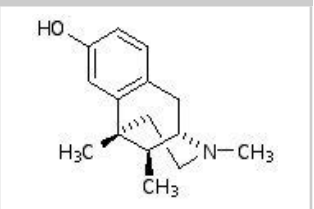


Catalog number : 9240-007 **CASRN :** 133005-40-0

Name : (+)-Metazocine fumarate

Mol. formula : $C_{34}H_{46}N_2O_6$ **FW :** 578.75 **DEA schedule :** 2

References : Carroll, FI; *et al. J Med Chem* **1992**, *35*, 2812-8.



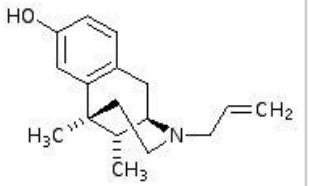
Catalog number : 9240-018 **CASRN :** 14198-28-8

Name : (-)-N-Allylnormetazocine hydrochloride, (-)-NANM; (-)-SKF-10,047

Mol. formula : $C_{17}H_{24}ClNO$ **FW :** 293.85 **DEA schedule :** 0

Notes : *Sigma receptor standard ligand.*

References : Carroll, FI; *et al. J Med Chem* **1992**, *35*, 2812-8.



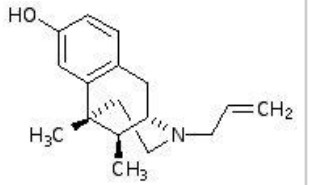
Catalog number : 9240-017 **CASRN :** 133005-41-1

Name : (+)-N-Allylnormetazocine hydrochloride, (+)-NANM; (+)-SKF-10,047

Mol. formula : $C_{17}H_{24}ClNO$ **FW :** 293.85 **DEA schedule :** 0

Notes : *Sigma receptor standard ligand.*

References : Carroll, FI; *et al. J Med Chem* **1992**, *35*, 2812-8.

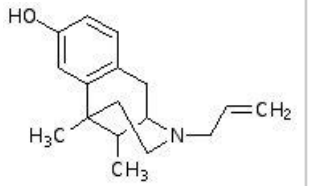


Catalog number : 9240-016 **CASRN :** 7619-35-4

Name : (±)-N-Allylnormetazocine hydrochloride; (±)-NANM; (±)-SKF-10,047; Alazocine

Mol. formula : $C_{17}H_{24}ClNO$ **FW :** 293.85 **DEA schedule :** 0

Notes : *Sigma receptor standard ligand.*

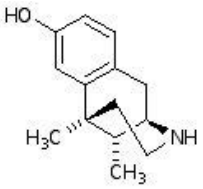


Catalog number : 9240-004 **CASRN :** 16603-67-1

Name : (-)-*cis*-Normetazocine

Mol. formula : $C_{14}H_{19}NO$ **FW :** 217.31 **DEA schedule :** 0

References : Carroll, FI; *et al. J Med Chem* **1992**, *35*, 2812-8.

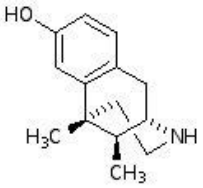


Catalog number : 9240-005 **CASRN :** 16670-83-0

Name : (+)-*cis*-Normetazocine

Mol. formula : $C_{14}H_{19}NO$ **FW :** 217.31 **DEA schedule :** 0

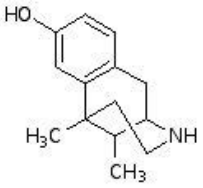
References : Carroll, FI; *et al. J Med Chem* **1992**, *35*, 2812-8.



Catalog number : 9240-002 **CASRN :** 16808-63-2

Name : (±)-Normetazocine

Mol. formula : $C_{14}H_{19}NO$ **FW :** 217.31 **DEA schedule :** 0



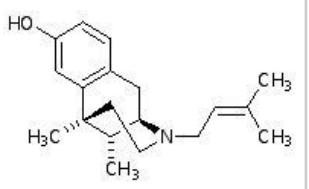
Catalog number : 9709-003 **CASRN :** 124819-25-6

Name : (-)-Pentazocine succinate

Mol. formula : $C_{23}H_{33}NO_5$ **FW :** 403.52 **DEA schedule :** 4

Notes : *Sigma receptor standard ligand.*

References : *Merck Index*, 14th ed., Monograph 7121.
Brogden, RN; Speight, TM; Avery, GS *Drugs* **1973**, *5*, 6-91.
Carroll, FI; *et al. J Med Chem* **1992**, *35*, 2812-8.



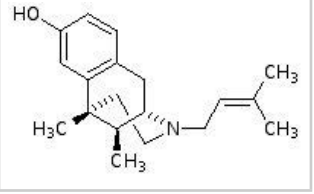
Catalog number : 9709-002 **CASRN :** 124819-26-7

Name : (+)-Pentazocine succinate

Mol. formula : $C_{23}H_{33}NO_5$ **FW :** 403.52 **DEA schedule :** 4

Notes : *Sigma receptor standard ligand.*

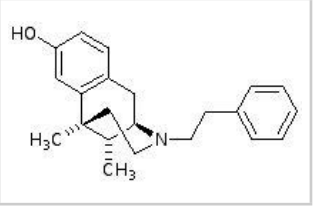
References : *Merck Index*, 14th ed., Monograph 7121.
Brogden, RN; Speight, TM; Avery, GS *Drugs* **1973**, *5*, 6-91.
Carroll, FI; *et al. J Med Chem* **1992**, *35*, 2812-8.



Catalog number : 9715-003

Name : (-)-Phenazocine hydrobromide

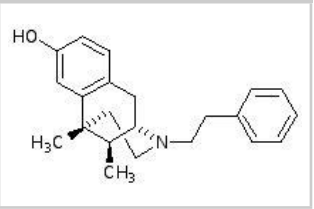
Mol. formula : $C_{22}H_{28}BrNO$ **FW :** 402.39 **DEA schedule :** 2



Catalog number : 9715-002

Name : (+)-Phenazocine hydrobromide

Mol. formula : $C_{22}H_{28}BrNO$ **FW :** 402.39 **DEA schedule :** 2



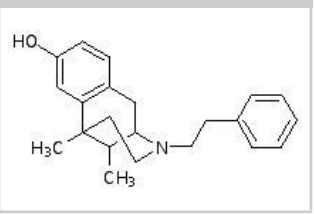
Catalog number : 9715-001 **CASRN :** 1239-04-9

Name : (±)-Phenazocine hydrobromide

Mol. formula : $C_{22}H_{28}BrNO$ **FW :** 402.39 **DEA schedule :** 2

Notes : *Narcotic analgesic, σ receptor ligand*

References : *Merck Index*, 14th ed., Monograph 7218.



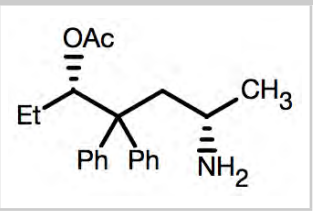
Opioids: Methadone Class

Catalog number : 9633-010

Name : (-)-α-Acetyl-N,N-dinormethadol hydrochloride

Mol. formula : $C_{21}H_{28}ClNO_2$ **FW :** 361.92 **DEA schedule :** 0

References : Carroll, FI; *et al. J Org Chem* **1976**, *41*, 3521-4.

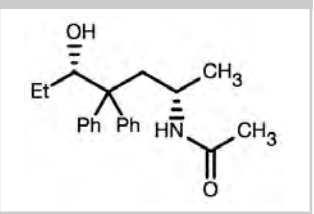


Catalog number : 9633-050

Name : (-)-α-N-Acetyl-N,N-dinormethadol

Mol. formula : $C_{21}H_{27}NO_2$ **FW :** 325.45 **DEA schedule :** 1

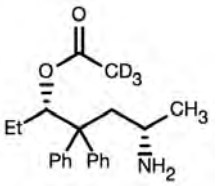
References : Carroll, FI; *et al. J Org Chem* **1976**, *41*, 3521-4.



Catalog number : 9633-012

Name : (-)-[Acetyl-$^{2}H_3$]α-Acetyl-N,N-dinormethadol hydrochloride

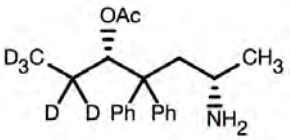
Mol. formula : $C_{21}H_{28}ClNO_2$ **FW :** 361.92 **DEA schedule :** 0



Catalog number : 9633-014

Name : (-)-[1,1,1,2,2,3-$^{2}H_6$]α-Acetyl-N,N-dinormethadol hydrochloride

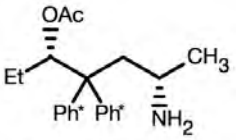
Mol. formula : $C_{21}H_{28}ClNO_2$ **FW :** 361.92 **DEA schedule :** 0



Catalog number : 9633-011

Name : (-)-[*o,o'* -$^{3}H_2$(n)]-α-Acetyl-N,N-dinormethadol hydrochloride

Mol. formula : $C_{21}H_{28}ClNO_2$ **FW :** 389.97 **DEA schedule :** 0

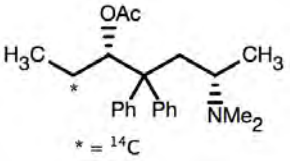


Ph* = *o*-T-phenyl

Catalog number : 9648-013

Name : (-)-[2-^{14}C]-α-Acetylmethadol hydrochloride

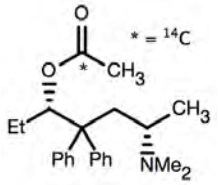
Mol. formula : $C_{23}H_{32}ClNO_2$ **FW :** 353.50 **DEA schedule :** 2



Catalog number : 9648-014

Name : (-)-[Acetyl-^{14}C]-α-Acetylmethadol

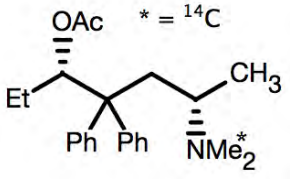
Mol. formula : $C_{23}H_{32}ClNO_2$ **FW :** 353.50 **DEA schedule :** 2



Catalog number : 9648-015

Name : (-)-[N-$^{14}CH_3$]-α-Acetylmethadol hydrochloride

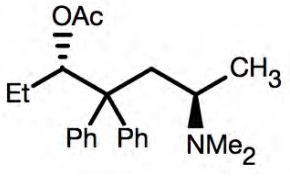
Mol. formula : $C_{23}H_{31}NO_2$ **FW :** 353.50 **DEA schedule :** 2



Catalog number : 9607-001

Name : (-)-β-Acetylmethadol hydrochloride

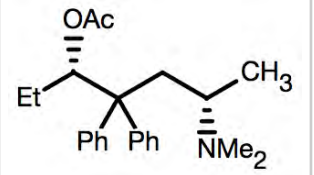
Mol. formula : $C_{23}H_{32}ClNO_2$ **FW :** 389.97 **DEA schedule :** 1



Catalog number : 9648-001 **CASRN :** 43033-72-3

Name : (-)-α-Acetylmethadol hydrochloride; LAAM hydrochloride

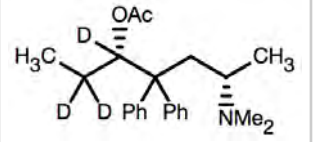
Mol. formula : $C_{23}H_{32}ClNO_2$ **FW :** 389.97 **DEA schedule :** 2



Catalog number : 9648-016

Name : (-)-[2,2,3-$^2H_3$]α-Acetylmethadol hydrochloride

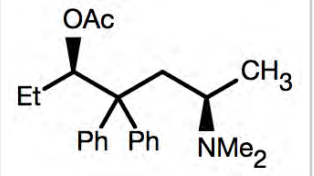
Mol. formula : $C_{23}H_{32}ClNO_2$ **FW :** 353.50 **DEA schedule :** 2



Catalog number : 9603-003

Name : (+)-α-Acetylmethadol hydrochloride

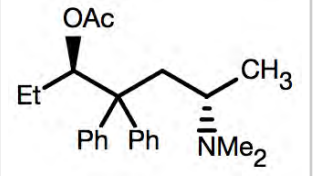
Mol. formula : $C_{23}H_{32}ClNO_2$ **FW :** 389.97 **DEA schedule :** 1



Catalog number : 9607-002

Name : (+)-β-Acetylmethadol hydrochloride

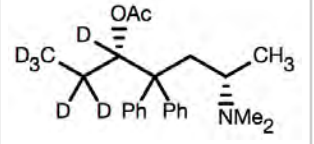
Mol. formula : $C_{23}H_{32}ClNO_2$ **FW :** 389.97 **DEA schedule :** 1



Catalog number : 9648-010

Name : (-)-[1,1,1,2,2,3-$^2H_6$]α-Acetylmethadol hydrochloride

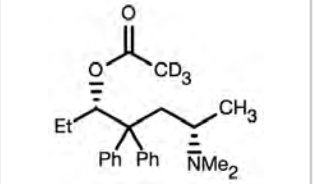
Mol. formula : $C_{24}H_{34}ClNO$ **FW :** 389.97 **DEA schedule :** 2



Catalog number : 9648-011

Name : (-)-[Acetyl-$^2H_3$]α-acetylmethadol hydrochloride

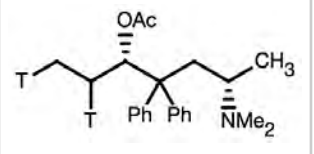
Mol. formula : $C_{21}H_{28}ClNO_2$ **FW :** 389.97 **DEA schedule :** 2



Catalog number : 9648-012

Name : (-)-[1,2-$^3H_2$]α-Acetylmethadol

Mol. formula : $C_{23}H_{32}ClNO_2$ **FW :** 353.50 **DEA schedule :** 2

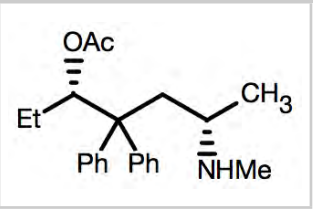


Catalog number : 9633-001

Name : (-)-α-Acetylnormethadol hydrochloride

Mol. formula : $C_{22}H_{30}ClNO_2$ **FW :** 375.94 **DEA schedule :** 1

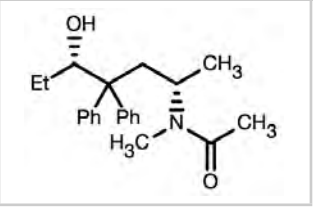
References : Carroll, FI; *et al. J Org Chem* **1976**, *41*, 3521-4.



Catalog number : 9633-040

Name : (-)-α-N-Acetylnormethadol

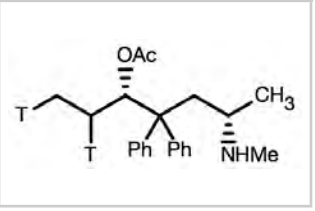
Mol. formula : $C_{22}H_{29}NO_2$ **FW :** 339.48 **DEA schedule :** 1



Catalog number : 9633-006

Name : (-)-[1,2-^{3}H]α-Acetylnormethadol hydrochloride

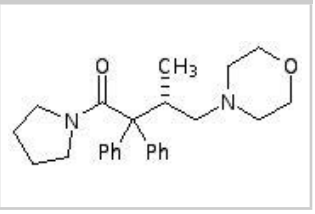
Mol. formula : $C_{23}H_{32}ClNO_2$ **FW :** 375.94 **DEA schedule :** 1



Catalog number : 9613-001

Name : Dextromoramide tartrate

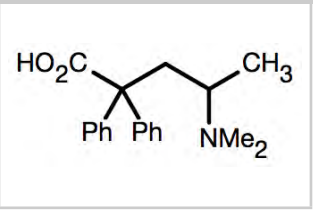
Mol. formula : $C_{25}H_{32}N_2O_2$ **FW :** 542.60 **DEA schedule :** 1



Catalog number : 9254-004

Name : (±)-4-Dimethylamino-2,2-diphenylvaleric acid

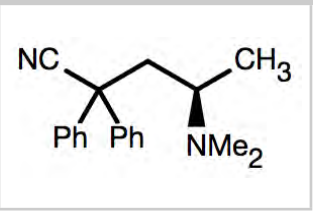
Mol. formula : $C_{19}H_{23}NO_2$ **FW :** 297.40 **DEA schedule :** 0



Catalog number : 9254-002

Name : (-)-(*R*)-4-Dimethylamino-2,2-diphenylvaleronitrile

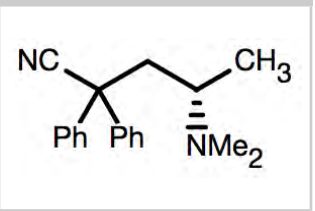
Mol. formula : $C_{19}H_{22}N_2$ **FW :** 278.40 **DEA schedule :** 2



Catalog number : 9254-001

Name : (+)-(*S*)-4-Dimethylamino-2,2-diphenylvaleronitrile

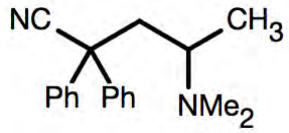
Mol. formula : $C_{19}H_{22}N_2$ **FW :** 278.40 **DEA schedule :** 2



Catalog number : 9254-003

Name : (±)-4-Dimethylamino-2,2-diphenylvaleronitrile

Mol. formula : $C_{19}H_{22}N_2$ **FW :** 278.40 **DEA schedule :** 2

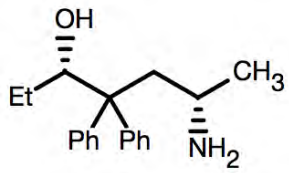


Catalog number : 9605-030

Name : (-)-α-N,N-Dinormethadol maleate

Mol. formula : $C_{23}H_{29}NO_5$ **FW :** 399.49 **DEA schedule :** 1

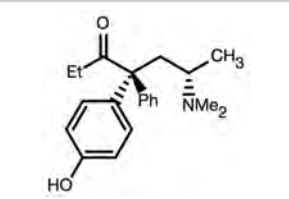
References : Carroll, FI; *et al. J Org Chem* **1976**, *41*, 3521-4.



Catalog number : 9250-061

Name : (4*R*,6*S*)-*p*-Hydroxymethadone hydrochloride

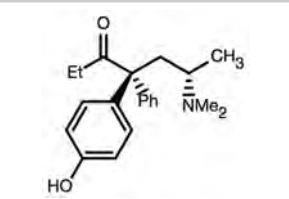
Mol. formula : $C_{21}H_{28}ClNO_2$ **FW :** 361.91 **DEA schedule :** 2



Catalog number : 9250-062

Name : (4*S*,6*S*)-*p*-Hydroxymethadone hydrochloride

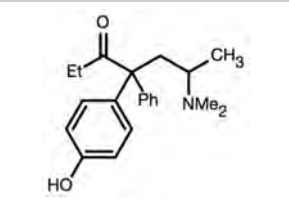
Mol. formula : $C_{21}H_{28}ClNO_2$ **FW :** 361.91 **DEA schedule :** 2



Catalog number : 9250-060

Name : (4*RS*,6*RS*)-*p*-Hydroxymethadone hydrochloride

Mol. formula : $C_{21}H_{28}ClNO_2$ **FW :** 361.91 **DEA schedule :** 2

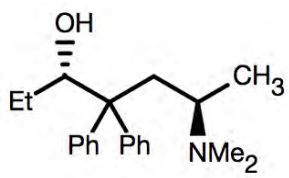


Catalog number : 9609-001 **CASRN :** 17199-55-2

Name : (-)-β-Methadol

Mol. formula : $C_{21}H_{29}NO$ **FW :** 311.47 **DEA schedule :** 1

References : Portoghese, PS; Williams DA *J Med Chem* **1969**, *12*, 839-44.

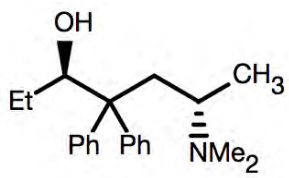


Catalog number : 9609-002

Name : (+)-β-Methadol

Mol. formula : $C_{21}H_{29}NO$ **FW :** 311.47 **DEA schedule :** 1

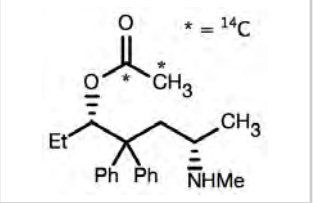
References : Portoghese, PS; Williams DA *J Med Chem* **1969**, *12*, 839-44.



Catalog number : 9633-005

Name : (-)-[Acetyl-$^{14}C_2$]-α-Acetylnormethadol hydrochloride

Mol. formula : $C_{22}H_{30}ClNO_2$ **FW :** 375.94 **DEA schedule :** 1

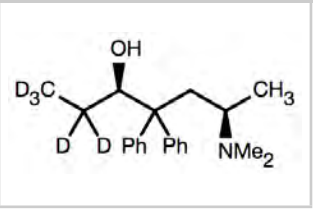


Catalog number : 9605-010

Name : [1,1,1,2,2-$^2H_5$]α-Methadol hydrochloride

Mol. formula : $C_{21}H_{30}ClNO$ **FW :** 347.93 **DEA schedule :** 1

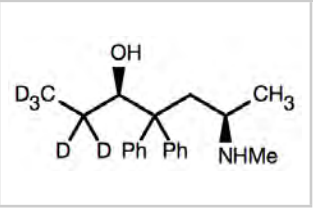
References : Portoghese, PS; Williams DA *J Med Chem* **1969**, *12*, 839-44.



Catalog number : 9605-021

Name : [1,1,1,2,2-$^2H_5$]α-Normethadol perchlorate

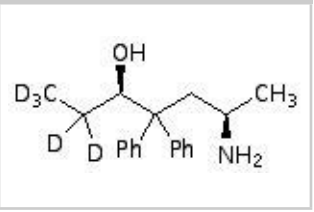
Mol. formula : $C_{20}H_{28}ClNO_5$ **FW :** 397.90 **DEA schedule :** 1



Catalog number : 9605-031

Name : [1,1,1,2,2-$^2H_5$]α-N,N-Dinormethadol maleate

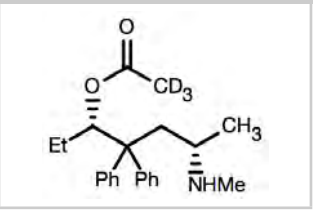
Mol. formula : $C_{19}H_{25}NO$ **FW :** 399.49 **DEA schedule :** 1



Catalog number : 9633-003

Name : (-)-[Acetyl-$^2H_3$]α-Acetylnormethadol hydrochloride

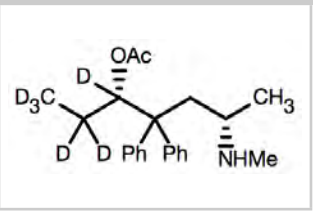
Mol. formula : $C_{22}H_{30}ClNO_2$ **FW :** 375.94 **DEA schedule :** 1



Catalog number : 9633-004

Name : (-)-[1,1,1,2,2,3-$^2H_6$]α-Acetylnormethadol hydrochloride

Mol. formula : $C_{23}H_{22}ClNO_2$ **FW :** 375.94 **DEA schedule :** 1

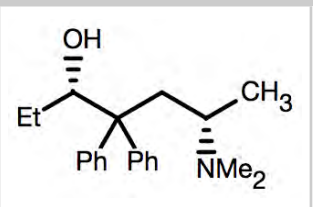


Catalog number : 9605-001

Name : (-)-α-Methadol hydrochloride

Mol. formula : $C_{21}H_{30}ClNO$ **FW :** 347.93 **DEA schedule :** 1

References : Portoghese, PS; Williams DA *J Med Chem* **1969**, *12*, 839-44.

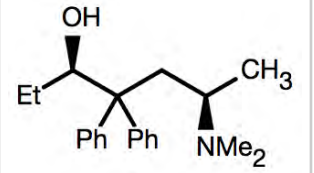


Catalog number : 9605-002 **CASRN :** 17199-54-1

Name : (+)-α-Methadol hydrochloride

Mol. formula : $C_{21}H_{30}ClNO$ **FW :** 347.93 **DEA schedule :** 1

References : Portoghese, PS; Williams DA *J Med Chem* **1969**, *12*, 839-44.

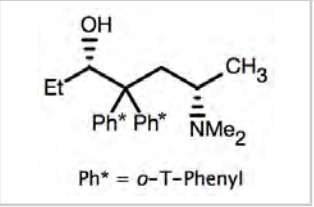


Catalog number : 9605-003

Name : (-)-[*o,o'*-$^3H_2$(n)]α-Methadol hydrochloride

Mol. formula : $C_{21}H_{29}NO$ **FW :** 347.93 **DEA schedule :** 1

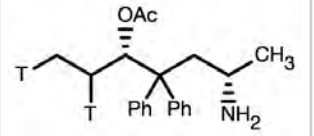
References : Portoghese, PS; Williams DA *J Med Chem* **1969**, *12*, 839-44.



Catalog number : 9633-015

Name : (-)-[1,2-$^3H_2$]α-Acetyl-N,N-dinormethadol hydrochloride

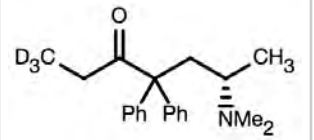
Mol. formula : $C_{21}H_{28}ClNO_2$ **FW :** 361.9-2 **DEA schedule :** 0



Catalog number : 9250-011

Name : (+)-[1,1,1-$^2H_3$]Methadone hydrochloride

Mol. formula : $C_{21}H_{28}ClNO$ **FW :** 348.92 **DEA schedule :** 2

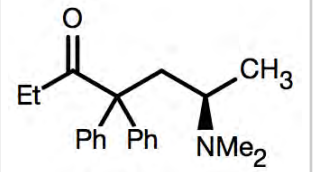


Catalog number : 9250-002 **CASRN :** 125-58-6

Name : (-)-(*R*)-Methadone

Mol. formula : $C_{21}H_{27}NO$ **FW :** 309.46 **DEA schedule :** 2

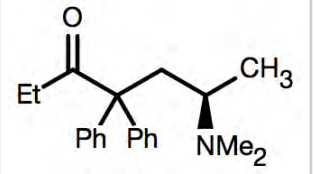
References : *Merck Index*, 14th ed., Monograph 5944.



Catalog number : 9250-005 **CASRN :** 125-58-6

Name : (-)-((*R*)-Methadone hydrochloride

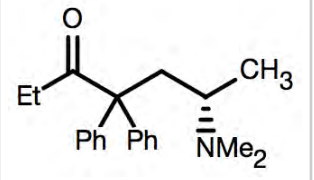
Mol. formula : $C_{21}H_{28}ClNO$ **FW :** 345.92 **DEA schedule :** 2



Catalog number : 9250-001 **CASRN :** 5653-80-5

Name : (+)-(S)-Methadone

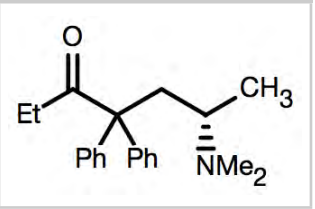
Mol. formula : $C_{21}H_{27}NO$ **FW :** 309.46 **DEA schedule :** 2



Catalog number : 9250-004 **CASRN :** 5653-80-5

Name : (+)-(*S*)-Methadone hydrochloride

Mol. formula : $C_{21}H_{28}ClNO$ **FW :** 345.92 **DEA schedule :** 2

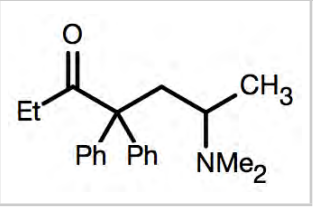


Catalog number : 9250-003 **CASRN :** 1095-90-5

Name : (±)-Methadone hydrochloride

Mol. formula : $C_{21}H_{28}ClNO$ **FW :** 345.92 **DEA schedule :** 2

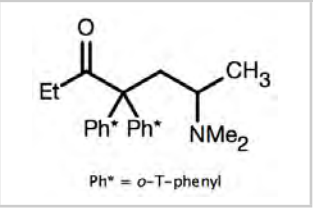
References : *Merck Index*, 14th ed., Monograph 5944.



Catalog number : 9250-006

Name : (±)-[*o,o'*-$^{3}H_2$(n)]Methadone

Mol. formula : $C_{21}H_{27}NO$ **FW :** 313.46 **DEA schedule :** 2

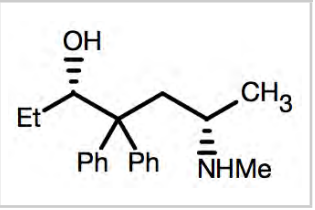


Catalog number : 9605-020

Name : (-)-α-Normethadol perchlorate

Mol. formula : $C_{20}H_{28}ClNO_5$ **FW :** 397.90 **DEA schedule :** 1

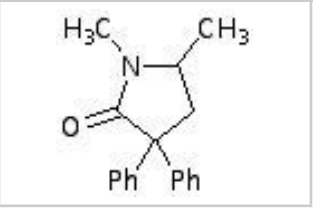
References : Carroll, FI; *et al. J Org Chem* **1976**, *41*, 3521-4.



Catalog number : 9254-005

Name : (±)-1,5-Dimethyl-3,3-diphenyl-2-pyrrolidone

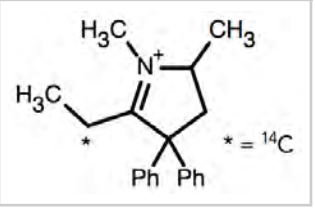
Mol. formula : $C_{18}H_{19}NO$ **FW :** 265.36 **DEA schedule :** 0



Catalog number : 9250-026

Name : [1'-^{14}C]-2-Ethyl-1,5-dimethyl-3,3-diphenylpyrrolinium perchlorate

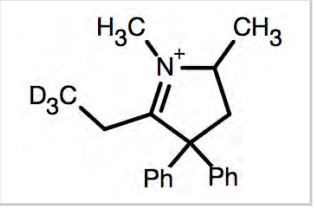
Mol. formula : $C_{20}H_{25}ClNO_4$ **FW :** 536.01 **DEA schedule :** 0



Catalog number : 9250-027

Name : [Ethyl-2',2',2'-$^{2}H_3$]-1,5-Dimethyl-3,3-diphenyl-2-ethylpyrrolinium perchlorate

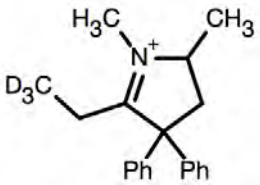
Mol. formula : $C_{20}H_{25}ClNO_4$ **FW :** 384.91 **DEA schedule :** 0



Catalog number : 9250-032

Name : [Ethyl-2',2',2'-$^{2}H_3$]-3,3-Diphenyl-2-ethyl-5-methyl-1-pyrroline hydrochloride

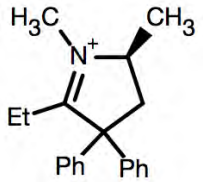
Mol. formula : $C_{20}H_{25}ClN$ **FW :** 302.86 **DEA schedule :** 0



Catalog number : 9250-024

Name : (-)-(*S*)-2-Ethyl-1,5-dimethyl-3,3-diphenylpyrrolinium perchlorate

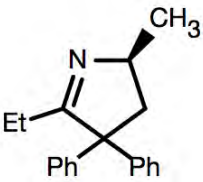
Mol. formula : $C_{20}H_{24}ClNO_4$ **FW :** 377.88 **DEA schedule :** 0



Catalog number : 9250-033

Name : (-)-(*S*)-2-Ethyl-5-methyl-3,3-diphenyl-1-pyrroline hydrochloride

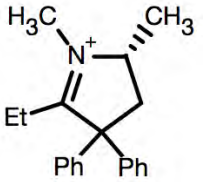
Mol. formula : $C_{19}H_{22}ClN$ **FW :** 299.85 **DEA schedule :** 0



Catalog number : 9250-025

Name : (+)-(*R*)-2-Ethyl-1,5-dimethyl-3,3-diphenylpyrrolinium perchlorate

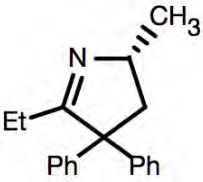
Mol. formula : $C_{20}H_{24}ClNO_4$ **FW :** 377.88 **DEA schedule :** 0



Catalog number : 9250-034

Name : (+)-(*R*)-2-Ethyl-5-methyl-3,3-diphenyl-1-pyrroline hydrochloride

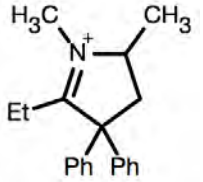
Mol. formula : $C_{19}H_{22}ClN$ **FW :** 299.85 **DEA schedule :** 0



Catalog number : 9250-021

Name : (±)-2-Ethyl-1,5-dimethyl-3,3-diphenylpyrrolinium perchlorate

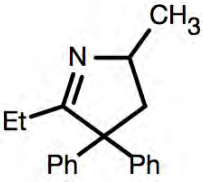
Mol. formula : $C_{20}H_{24}ClNO_4$ **FW :** 377.86 **DEA schedule :** 0



Catalog number : 9250-031

Name : (±)-2-Ethyl-5-methyl-3,3-diphenyl-1-pyrroline hydrochloride

Mol. formula : $C_{19}H_{22}ClN$ **FW :** 299.85 **DEA schedule :** 0



Opioids: Miscellaneous

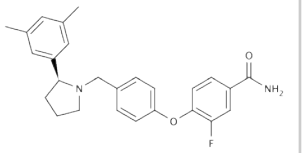
Catalog number : NOCD-107 **CASRN :** 1174130-61-0

Name : LY-2456302

Mol. formula : $C_{26}H_{28}ClFN_2O_2$ **FW :** 454.97 **DEA schedule :** 0

Notes : *κ-Opioid antagonist.*

References : Peters, MF; et al., *Eur J Pharmacol* **2011**, *661*, 27-34.



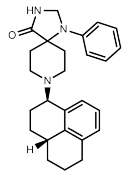
Catalog number : NOCD-138 **CASRN :** 309254-79-3

Name : Ro 64-6198 hydrochloride

Mol. formula : $C_{26}H_{31}N_3O \bullet HCl$ **FW :** 438.02 **DEA schedule :** 0

Notes : *Potent nociceptin opioid receptor agonist.*

References : Wichmann, J; *et al.*, *Eur. J. Med. Chem.* **2000**, *35*, 839-851.



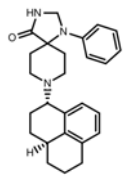
Catalog number : NOCD-139

Name : Ro 64-6198 analog [(+)-isomer of Ro 64-6198]

Mol. formula : $C_{26}H_{31}N_3O \bullet HCl$ **FW :** 438.02 **DEA schedule :** 0

Notes : *Nociceptin opioid receptor agonist. 32-fold less potent (+)-enantiomer of Ro 64-6198.*

References : Jenck, F; *et al.*, *Proc Nat Acad Sci USA* **2000**, *97*, 4938-4943.



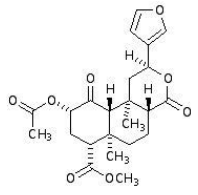
Catalog number : NOCD-099 **CASRN :** 83729-01-5

Name : Salvinorin A

Mol. formula : $C_{23}H_{28}O_8$ **FW :** 432.47 **DEA schedule :** 0

Notes : *Hallucinogen; κ-opioid agonist.*

References : Roth, BL; *et al. Proc Natl Acad Sci USA* **2002**, *99*, 11934-9.



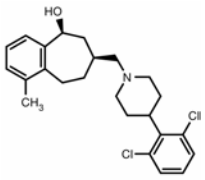
Catalog number : NOCD-134 **CASRN :** 371980-98-2

Name : SB-612111 hydrochloride

Mol. formula : $C_{24}H_{29}Cl_2NO \bullet HCl$ **FW :** 454.87 **DEA schedule :** 0

Notes : *Nociceptin/orphanin FQ (NOP) receptor antagonist.*

References : Zaratin, PF; *et al.*, *J Pharmacol Exp Ther* **2004**, *308*, 454-61.



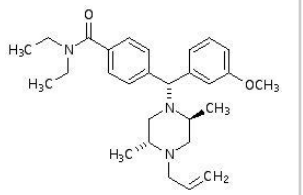
Catalog number : NOCD-055 **CASRN :** 156727-74-1

Name : SNC 80

Mol. formula : $C_{28}H_{39}N_3O_2$ **FW :** 449.64 **DEA schedule :** 0

Notes : *Highly-selective δ-opioid receptor agonist.*

References : Do Carmo, GP; *et al. Eur J Pharmacol* **2006**, *547*, 92-100.

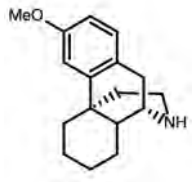


Opioids: Morphinan Class

Catalog number : 9732-001 **CASRN :** 1087-69-0

Name : (+)-3-Methoxymorphinan hydrochloride

Mol. formula : $C_{17}H_{23}ClNO$ **FW :** 293.84 **DEA schedule :** 0

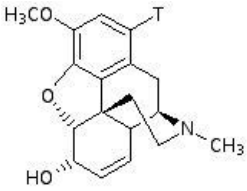


Opioids: Morphine Class

Catalog number : 9050-011

Name : [1-^{3}H]Codeine

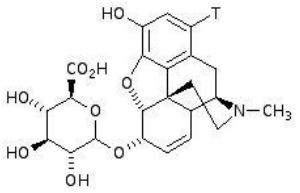
Mol. formula : $C_{18}H_{21}NO_3$ **FW :** 301.37 **DEA schedule :** 2



Catalog number : 9300-014

Name : [1-^{3}H]Morphine-6-glucuronide

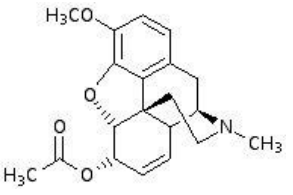
Mol. formula : $C_{23}H_{27}NO_9$ **FW :** 463.47 **DEA schedule :** 2



Catalog number : 9050-004 **CASRN :** 6703-27-1

Name : 6-Acetylcodeine

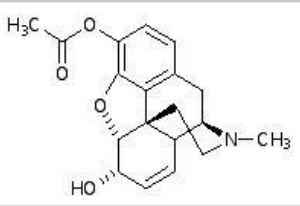
Mol. formula : $C_{20}H_{23}NO$ **FW :** 341.41 **DEA schedule :** 2



Catalog number : 9300-010

Name : 3-Acetylmorphine sulfamate

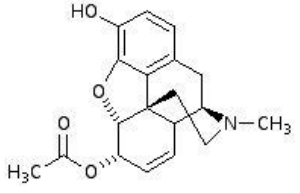
Mol. formula : $C_{19}H_{24}N_2O_7S$ **FW :** 424.47 **DEA schedule :** 2



Catalog number : 9300-004

Name : 6-Acetylmorphine

Mol. formula : $C_{19}H_{21}NO_4$ **FW :** 327.38 **DEA schedule :** 2



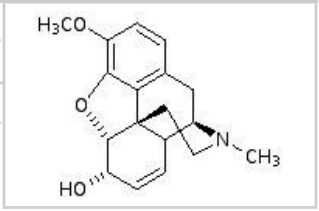
Catalog number : 9050-001 **CASRN :** 1422-07-7

Name : Codeine hydrochloride

Mol. formula : $C_{18}H_{22}ClNO_3$ **FW :** 335.84 **DEA schedule :** 2

Notes : *Narcotic analgesic; antitussive*

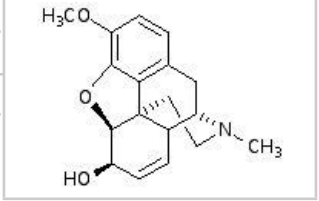
References : *Merck Index*, 14th ed., Monograph 2455.



Catalog number : 9050-010 **CASRN :** 76-57-3

Name : (+)-Codeine base

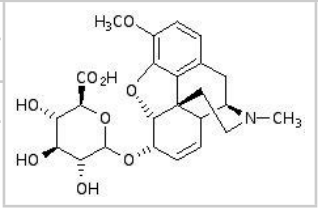
Mol. formula : $C_{18}H_{21}NO_3$ **FW :** 299.36 **DEA schedule :** 2



Catalog number : 9050-009

Name : Codeine-6-β-D-glucuronide

Mol. formula : $C_{24}H_{29}NO_9$ **FW :** 475.50 **DEA schedule :** 2



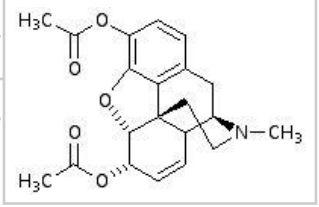
Catalog number : 9200-001 **CASRN :** 1502-95-0

Name : 3,6-Diacetylmorphine hydrochloride; Diamorphine HCl

Mol. formula : $C_{21}H_{24}ClNO_5$ **FW :** 405.88 **DEA schedule :** 1

Notes : *Narcotic analgesic*

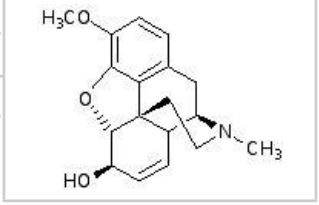
References : *Merck Index*, 14th ed., Monograph 2968.



Catalog number : 9050-006 **CASRN :** 509-64-8

Name : Isocodeine

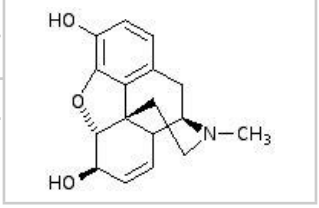
Mol. formula : $C_{18}H_{21}NO_3$ **FW :** 299.35 **DEA schedule :** 2



Catalog number : 9300-020 **CASRN :** 143-70-4

Name : α-Isomorphine

Mol. formula : $C_{17}H_{19}NO_3$ **FW :** 285.35 **DEA schedule :** 2



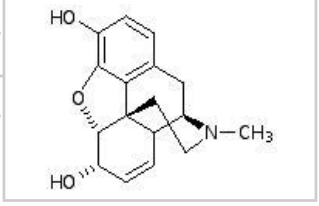
Catalog number : 9300-007 **CASRN :** 57-27-2

Name : Morphine base

Mol. formula : $C_{17}H_{19}NO_3$ **FW :** 285.33 **DEA schedule :** 2

Notes : *Narcotic analgesic; antitussive; antiperistaltic*

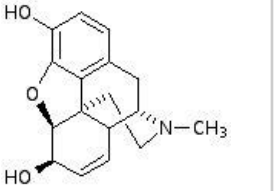
References : *Merck Index*, 14th ed., Monograph 6276.



Catalog number : 9300-012 **CASRN :** 65165-99-3

Name : (+)-Morphine base

Mol. formula : $C_{17}H_{19}NO_3$ **FW :** 285.35 **DEA schedule :** 2

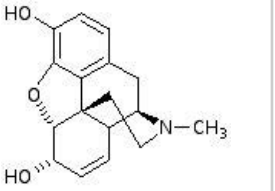


Catalog number : 9300-016 **CASRN :** 52-26-6

Name : Morphine hydrochloride monohydrate

Mol. formula : $C_{17}H_{20}ClNO_3$ **FW :** 321.81 **DEA schedule :** 2

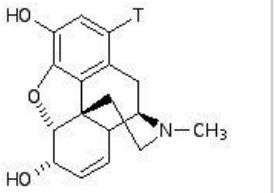
References : *Merck Index*, 14th ed., Monograph 6276.



Catalog number : 9300-002

Name : Tritium-labeled Morphine sulfate

Mol. formula : $C_{17}H_{19}NO_3$ **FW :** 475.50 **DEA schedule :** 2



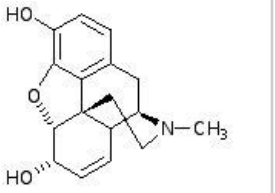
Catalog number : 9300-001 **CASRN :** 6211-15-0

Name : Morphine sulfate pentahydrate

Mol. formula : $C_{34}H_{40}N_2O_{10}S$ **FW :** 758.83 **DEA schedule :** 2

Notes : *Narcotic analgesic; prototypic μ opioid receptor agonist; sedative*

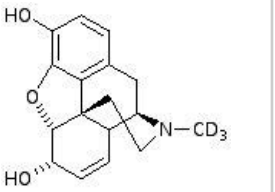
References : *Merck Index*, 14th ed., Monograph 6276.



Catalog number : 9300-005 **CASRN :** 67293-88-3

Name : [N-C^2H_3]Morphine

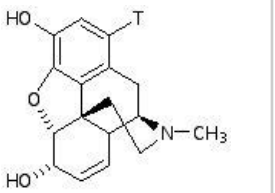
Mol. formula : $C_{17}H_{19}NO_3$ **FW :** 288.36 **DEA schedule :** 2



Catalog number : 9300-006 **CASRN :** 80573-75-7

Name : [1-^{3}H(n)]Morphine

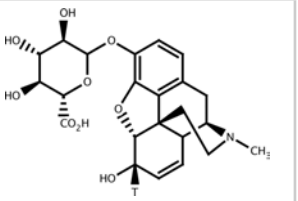
Mol. formula : $C_{17}H_{19}NO_3$ **FW :** 287.35 **DEA schedule :** 2



Catalog number : 9300-011

Name : Morphine-(6-^{3}H)-3-glucuronide

Mol. formula : $C_{23}H_{27}NO_9$ **FW :** 463.47 **DEA schedule :** 2

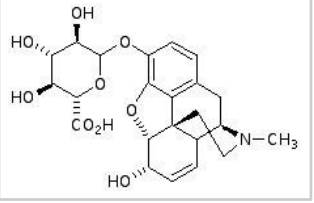


Catalog number : 9300-003

Name : Morphine-3-β-D-glucuronide

Mol. formula : $C_{23}H_{27}NO_9$ **FW :** 461.44 **DEA schedule :** 2

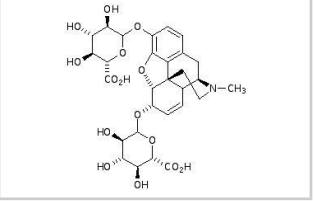
References : Berrang, B; *et al. Synthetic Communications* **1975**, *5*, 231-236.



Catalog number : 9300-015

Name : Morphine-3,6-di-β-D-glucuronide, monolithium salt

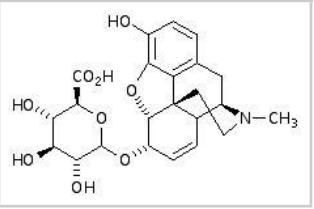
Mol. formula : $C_{29}H_{34}LiNO_{15}$ **FW :** 643.52 **DEA schedule :** 2



Catalog number : 9300-013 **CASRN :** 20290-10-2

Name : Morphine-6-β-D-glucuronide

Mol. formula : $C_{23}H_{27}NO_9$ **FW :** 461.47 **DEA schedule :** 2



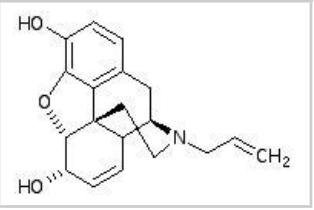
Catalog number : 9400-001 **CASRN :** 62-67-9

Name : Nalorphine hydrochloride

Mol. formula : $C_{19}H_{22}ClNO_3$ **FW :** 347.84 **DEA schedule :** 3

Notes : *Narcotic antagonist*

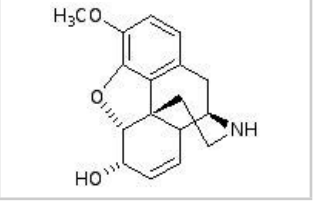
References : *Merck Index*, 14th ed., Monograph 6361.



Catalog number : 9050-002

Name : Norcodeine hydrochloride

Mol. formula : $C_{17}H_{20}ClNO_3$ **FW :** 321.81 **DEA schedule :** 2

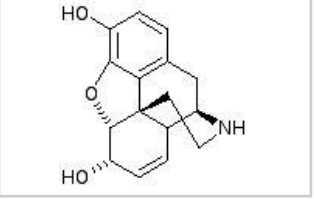


Catalog number : 9313-001 **CASRN :** 3372-02-9

Name : Normorphine hydrochloride

Mol. formula : $C_{16}H_{18}ClNO_3$ **FW :** 307.78 **DEA schedule :** 1

References : *Merck Index*, 14th ed., Monograph 6711.



Opioids: Orvinol Class

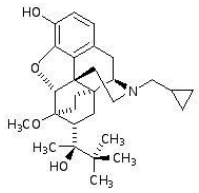
Catalog number : 9064-001 **CASRN :** 53152-21-9

Name : Buprenorphine hydrochloride

Mol. formula : $C_{29}H_{42}ClNO_4$ **FW :** 504.11 **DEA schedule :** 3

Notes : *Narcotic Analgesic*

References : Robinson, SE *CNS Drug Rev* **2002**, *8*, 377-90.



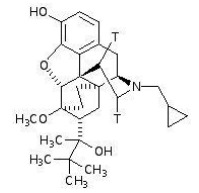
Catalog number : 9064-002 **CASRN :** 161772-95-8

Name : [15,16-$^3H_2$]Buprenorphine hydrochloride

Mol. formula : $C_{26}H_{38}ClNO_4$ **FW :** 508.11 **DEA schedule :** 5

Notes : *Narcotic analgesic (tritium-labeled).*

References : Robinson, SE *CNS Drug Rev* **2002**, *8*, 377-90.



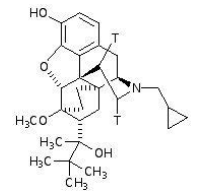
Catalog number : 9064-003 **CASRN :** 161772-95-8

Name : [15,16-$^3H_2$]Buprenorphine

Mol. formula : $C_{29}H_{41}NO_4$ **FW :** 508.11 **DEA schedule :** 3

Notes : *Narcotic analgesic (tritium-labeled).*

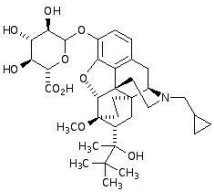
References : Robinson, SE *CNS Drug Rev* **2002**, *8*, 377-90.



Catalog number : 9064-005 **CASRN :** 101224-22-0

Name : Buprenorphine-3-β-D-glucuronide

Mol. formula : $C_{35}H_{49}NO_{10}$ **FW :** 654.59 **DEA schedule :** 5



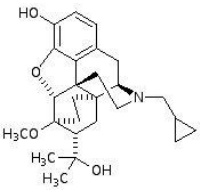
Catalog number : 9058-003 **CASRN :** 14357-78-9

Name : Diprenorphine

Mol. formula : $C_{26}H_{35}NO_4$ **FW :** 425.54 **DEA schedule :** 2

Notes : *(see footnotes 1 & 2 in Section C)*

References : *Merck Index*, 14th ed., Monograph 3340.



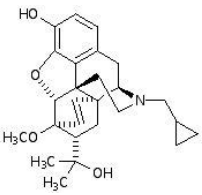
Catalog number : 9058-001 **CASRN :** 14357-78-9

Name : Diprenorphine hydrochloride

Mol. formula : $C_{26}H_{36}ClNO_4$ **FW :** 462.04 **DEA schedule :** 2

Notes : *(see footnotes 1 & 2 in Section C)*

References : *Merck Index*, 14th ed., Monograph 3340.

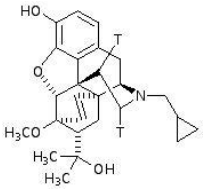


Catalog number : 9058-002

Name : [15,16-$^{3}H_2$]Diprenorphine

Mol. formula : $C_{26}H_{36}ClNO_4$ **FW :** 429.58 **DEA schedule :** 2

Notes : *(see footnotes 1 & 2 in Section C)*



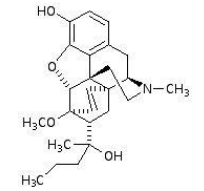
Catalog number : 9059-001 **CASRN :** 14521-96-1

Name : Etorphine hydrochloride

Mol. formula : $C_{25}H_{34}ClNO_4$ **FW :** 448.01 **DEA schedule :** 2

Notes : *(see footnotes 1 & 2 in Section C)*

References : *Merck Index*, 14th ed., Monograph 3888.

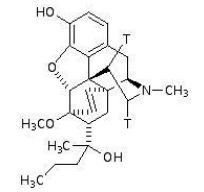


Catalog number : 9056-001

Name : [15,16-$^{3}H_2$]Etorphine

Mol. formula : $C_{25}H_{33}NO_4$ **FW :** 429.58 **DEA schedule :** 1

Notes : *(see footnotes 1 & 2 in Section C)*



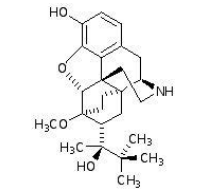
Catalog number : 9333-013 **CASRN :** 78715-23-8

Name : Norbuprenorphine base

Mol. formula : $C_{25}H_{35}NO_4$ **FW :** 413.55 **DEA schedule :** 2

Notes : *Buprenorphine metabolite.*

References : Robinson, SE *CNS Drug Rev* **2002**, *8*, 377-90.



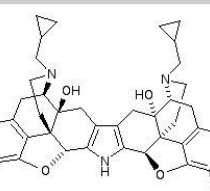
Opioids: Oxymorphone Class

Catalog number : NOCD-084

Name : [1,1'-^{3}H(n)]Norbinaltorphimine; [^{3}H]norBNI

Mol. formula : $C_{40}H_{43}N_3O_6$ **FW :** 665.80 **DEA schedule :** 0

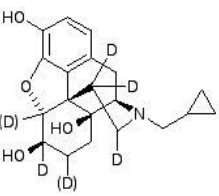
References : Birch, PJ; *et al. Eur J Pharmacol* **1987**, *144*, 405-8.
Portoghese, PS; Lipkowski, AW; Takemori, AE *Life Sci* **1987**, *40*, 1287-92.



Catalog number : 9652-057

Name : [5,6,7,15,15,16-$^{2}H_6$]-6α-Naltrexol

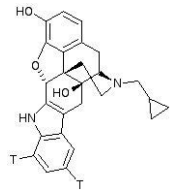
Mol. formula : $C_{20}H_{25}NO_4$ **FW :** 349.45 **DEA schedule :** 0



Catalog number : 9652-061

Name : [5',7'-$^3H_2$]Naltrindole

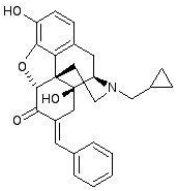
Mol. formula : $C_{26}H_{26}N_2O_3$ **FW :** 418.51 **DEA schedule :** 0



Catalog number : 9652-067 **CASRN :** 173556-52-0

Name : 7-Benzylidene-7-dehydronaltrexone (BNTX) hydrochloride

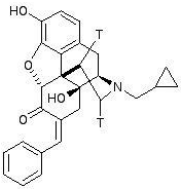
Mol. formula : $C_{27}H_{28}ClNO_4$ **FW :** 465.97 **DEA schedule :** 0



Catalog number : 9652-068

Name : [15,16-^{3}H]-7-Benzylidine-7-dehydronaltrexone; [^{3}H]BNTX

Mol. formula : $C_{27}H_{28}ClNO_4$ **FW :** 433.52 **DEA schedule :** 0



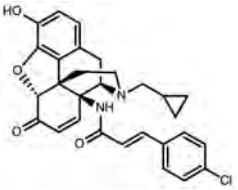
Catalog number : NOCD-100 **CASRN :** 117332-69-1

Name : Clocinnamox mesylate

Mol. formula : $C_{30}H_{31}ClN_2O_7S$ **FW :** 599.09

Notes : *Irreversible μ-opioid receptor antagonist.*

References : Comer, SD; *et al. J Pharmacol Exp Ther 1992, 262, 1051-6.*

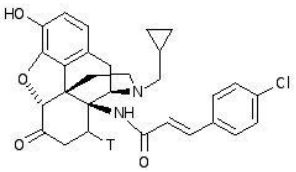


Catalog number : NOCD-079

Name : Tritium-labeled Clocinnamox

Mol. formula : $C_{29}H_{29}ClN_2O_4$ **FW :** 507.01 **DEA schedule :** 0

References : Comer, SD; Burke, TF; Lewis, JW; Woods, JH *J Pharmacol Exp Ther* **1992**, *262*, 1051-6.



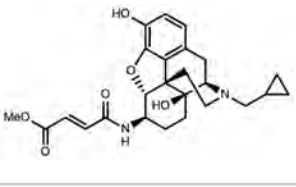
Catalog number : NOCD-141 **CASRN :** 72786-10-8

Name : β-Funaltrexamine hydrochloride; β-FNA hydrochloride

Mol. formula : $C_{25}H_{31}ClN_2O_6$ **FW :** 490.99 **DEA schedule :** 2

Notes : *Irreversible binding antagonist for the μ-opioid receptor.*

References : Portoghese, PS; el Kouhen, R; Law, PY; Loh, HH; Le Bourdonnec, B *Farmaco* **2001**, *56*, 191-6.



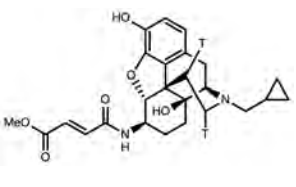
Catalog number : 9333-012

Name : [15,16-$^3H_2$]-6β-Funaltrexamine

Mol. formula : $C_{26}H_{33}ClN_2O_6$ **FW :** 458.53 **DEA schedule :** 2

Notes : *Irreversible μ-opioid receptor antagonist (tritium-labeled).*

References : Portoghese, PS; el Kouhen, R; Law, PY; Loh, HH; Le Bourdonnec, B *Farmaco* **2001**, *56*, 191-6.



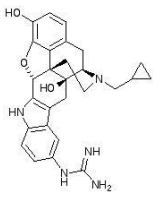
Catalog number : 9652-062

Name : 5'-GNTI trihydrochloride

Mol. formula : $C_{27}H_{32}Cl_3N_5O_3$ **FW :** 580.94 **DEA schedule :** 0

Notes : *Selective κ-opioid receptor antagonist.*

References : Jones, RM; Portoghese, PS *Eur J Pharmacol* **2000**, *396*, 49-52.



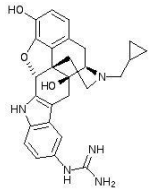
Catalog number : 9652-063 **CASRN :** 219655-56-8

Name : 5'-GNTI dihydrochloride

Mol. formula : $C_{27}H_{31}Cl_2N_5O_3$ **FW :** 544.48 **DEA schedule :** 0

Notes : *Selective κ-opioid receptor antagonist.*

References : Jones, RM; Portoghese, PS Eur J Pharmacol **2000**, *396*, 49-52.



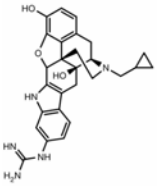
Catalog number : 9652-069 **CASRN :** 350693-06-0

Name : 6'-GNTI dihydrochloride

Mol. formula : $C_{27}H_{29}N_5O_3 \bullet 2HCl$ **FW :** 544.48 **DEA schedule :** 0

Notes : *Kappa-opioid receptor agonist that inhibits arrestin recruitment.*

References : Rives, ML; *et al., J Biol Chem* **2012**, *287*, 27050-4.



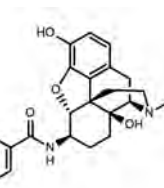
Catalog number : 9652-070 **CASRN :** 1314879-44-1

Name : IBNtxA

Mol. formula : $C_{27}H_{29}IN_2O_4 \bullet HCl$ **FW :** 608.90 **DEA schedule :** 0

Notes : *Kappa opioid receptor agonist.*

References : Majumdar, S; *et al.*, *J Med Chem* **2012**, *55*, 6352-62.



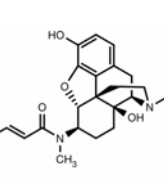
Catalog number : 9668-001 **CASRN :** 152658-17-8

Name : Nalfurafine

Mol. formula : $C_{28}H_{32}N_2O_5 \bullet HCl$ **FW :** 513.03 **DEA schedule :** 2

Notes : *Kappa opioid receptor agonist.*

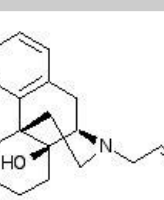
References : Kawai, K., et al., *Bioorg Med Chem* (**2008**) *16*, 9188.



Catalog number : 9652-040

Name : 6α-Naloxol hydrochloride

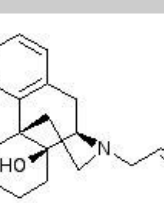
Mol. formula : $C_{19}H_{24}ClNO_4$ **FW :** 365.86 **DEA schedule :** 0



Catalog number : 9652-041

Name : 6β-Naloxol hydrochloride

Mol. formula : $C_{19}H_{24}ClNO_4$ **FW :** 365.86 **DEA schedule :** 0



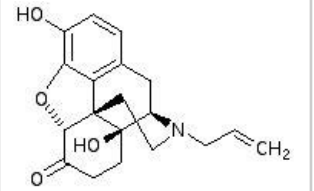
Catalog number : 9652-030 **CASRN :** 51481-60-8

Name : Naloxone hydrochloride

Mol. formula : $C_{19}H_{22}ClNO_4$ **FW :** 363.84 **DEA schedule :** 0

Notes : *Narcotic antagonist*

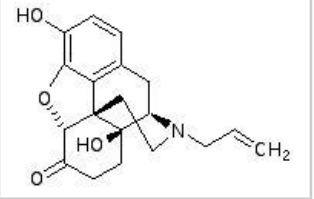
References : *Merck Index*, 14th ed., Monograph 6362.



Catalog number : 9652-032

Name : Naloxone pamoate

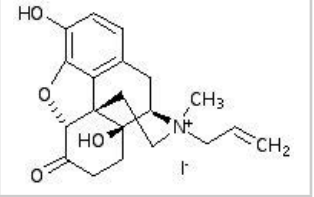
Mol. formula : $C_{61}H_{58}N_2O_{14}$ **FW :** 1043.14 **DEA schedule :** 0



Catalog number : 9652-037

Name : Naloxone methiodide

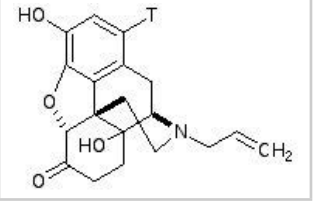
Mol. formula : $C_{20}H_{24}INO_4$ **FW :** 469.32 **DEA schedule :** 0



Catalog number : 9652-031

Name : (-)-[1-^{3}H(n)]Naloxone

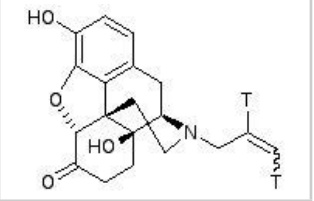
Mol. formula : $C_{19}H_{21}NO_4$ **FW :** 329.38 **DEA schedule :** 0



Catalog number : 9652-035

Name : (-)-[19,20-$^3H_2$]Naloxone

Mol. formula : $C_{19}H_{21}NO_4$ **FW :** 331.39 **DEA schedule :** 0



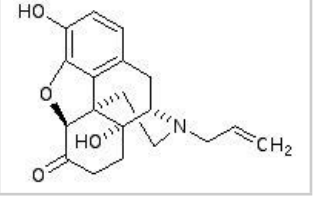
Catalog number : 9652-038 **CASRN :** 357-08-4

Name : (+)-Naloxone hydrochloride

Mol. formula : $C_{19}H_{22}ClNO_4$ **FW :** 363.85 **DEA schedule :** 0

Notes : *Unnatural isomer of naloxone. Selective Toll-like receptor 4 antagonist.*

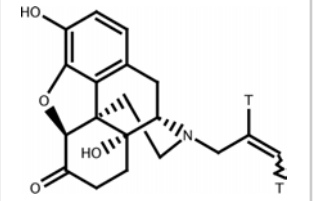
References : Hutchinson, MR; *et al.*, *Brain Behav Immun* **2010**, *24*, 83-95.; Watkins, LR; *et al.*, *Trends Pharmacol Sci* **2009**, *30*, 581-91.



Catalog number : 9652-039

Name : (+)-[19,20-$^3H_2$]Naloxone

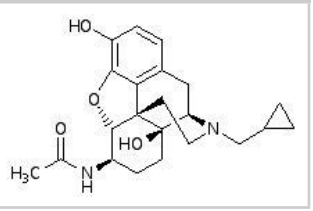
Mol. formula : $C_{19}H_{21}NO_4$ **FW :** 331.39 **DEA schedule :** 0



Catalog number : 9333-017 **CASRN :** 360770-17-8

Name : 6β-Naltrexamide

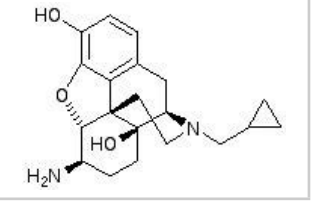
Mol. formula : $C_{22}H_{28}N_2O_4$ **FW :** 388.975 **DEA schedule :** 2



Catalog number : 9333-010

Name : 6β-Naltrexamine dihydrochloride

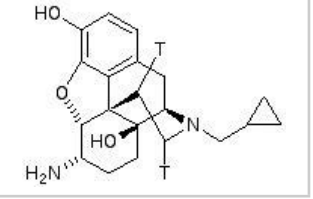
Mol. formula : $C_{20}H_{28}Cl_2N_2O_3$ **FW :** 415.36 **DEA schedule :** 2



Catalog number : 9333-009

Name : [15,16-$^3H_2$]-6β-Naltrexamine

Mol. formula : $C_{20}H_{26}N_2O_3$ **FW :** 346.45 **DEA schedule :** 2

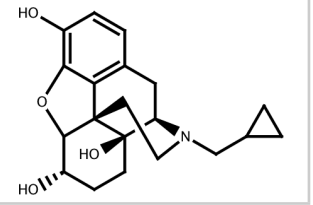


Catalog number : 9652-050

Name : 6α-Naltrexol hydrochloride

Mol. formula : $C_{20}H_{26}ClNO_4$ **FW :** 379.89 **DEA schedule :** 0

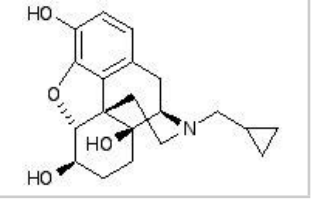
Notes : *Naltrexone metabolite.*



Catalog number : 9652-051 **CASRN :** 49625-89-0

Name : 6β-Naltrexol hydrochloride

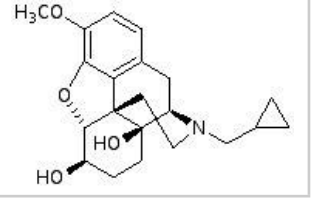
Mol. formula : $C_{20}H_{26}ClNO_4$ **FW :** 393.41 **DEA schedule :** 0



Catalog number : 9652-055

Name : 3-O-Methyl-6β-naltrexol

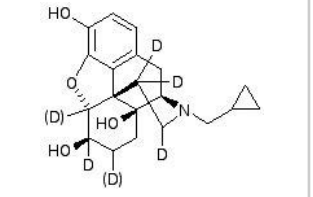
Mol. formula : $C_{21}H_{27}NO_4$ **FW :** 357.45 **DEA schedule :** 0



Catalog number : 9652-052

Name : [5,6,7,15,15,16-$^2H_6$]-6β-Naltrexol hydrochloride

Mol. formula : $C_{20}H_{26}ClNO_4$ **FW :** 385.91 **DEA schedule :** 0



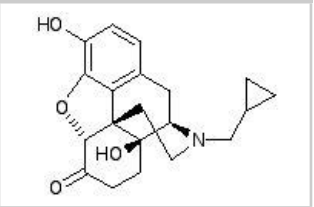
Catalog number : 9652-019 **CASRN :** 16676-29-2

Name : Naltrexone hydrochloride

Mol. formula : $C_{20}H_{24}ClNO_4$ **FW :** 377.88 **DEA schedule :** 0

Notes : *Narcotic antagonist*

References : *Merck Index*, 14th ed., Monograph 6363.



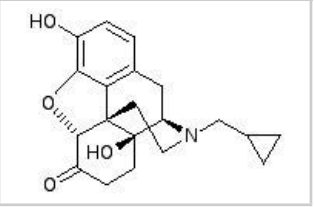
Catalog number : 9652-020 **CASRN :** 16590-41-3

Name : Naltrexone base

Mol. formula : $C_{20}H_{23}NO_4$ **FW :** 341.42 **DEA schedule :** 0

Notes : *Narcotic antagonist*

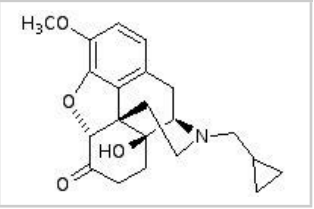
References : *Merck Index*, 14th ed., Monograph 6363.



Catalog number : 9652-027

Name : 3-O-Methylnaltrexone

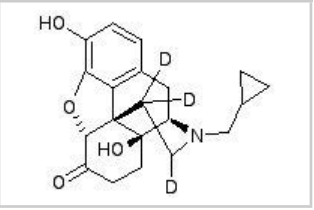
Mol. formula : $C_{21}H_{25}NO_4$ **FW :** 355.44 **DEA schedule :** 0



Catalog number : 9652-014

Name : [15,15,16-$^2H_3$]Naltrexone

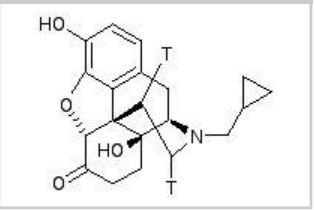
Mol. formula : $C_{20}H_{23}NO_4$ **FW :** 344.42 **DEA schedule :** 0



Catalog number : 9652-012

Name : [15,16-$^3H_2$]Naltrexone

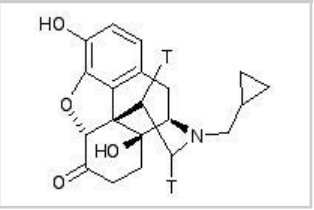
Mol. formula : $C_{20}H_{23}NO_4$ **FW :** 345.42 **DEA schedule :** 0



Catalog number : 9652-013

Name : [15,16-$^3H_2$]Naltrexone hydrochloride

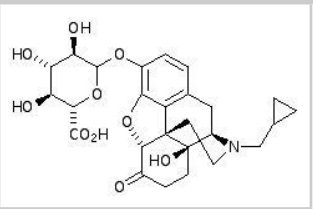
Mol. formula : $C_{20}H_{24}ClNO_4$ **FW :** 381.88 **DEA schedule :** 0



Catalog number : 9652-025

Name : Naltrexone-3-β-D-glucuronide

Mol. formula : $C_{26}H_{31}NO_{10}$ **FW :** 517.53 **DEA schedule :** 0



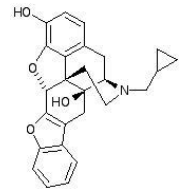
Catalog number : 9652-064 **CASRN :** 122517-78-6

Name : Naltriben methanesulfonate; NTB methanesulfonate

Mol. formula : $C_{27}H_{29}NO_7S$ **FW :** 511.60 **DEA schedule :** 0

Notes : *Selective δ-opioiod receptor antagonist.*

References : Sofuoglu, M; Portoghese, PS; Takemori, AE *J Pharmacol Exp Ther* **1991**, *257*, 676-80.



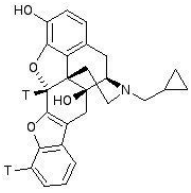
Catalog number : 9652-065

Name : Tritium-labeled Naltriben

Mol. formula : $C_{26}H_{25}NO_4$ **FW :** 419.50 **DEA schedule :** 0

Notes : *Selective δ-opioiod receptor antagonist (tritium-labeled).*

References : Sofuoglu, M; Portoghese, PS; Takemori, AE *J Pharmacol Exp Ther* **1991**, *257*, 676-80.



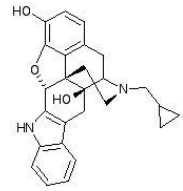
Catalog number : 9652-060 **CASRN :** 111469-81-9

Name : Naltrindole hydrochloride; NTI hydrochloride

Mol. formula : $C_{26}H_{27}ClN_2O_3$ **FW :** 450.96 **DEA schedule :** 0

Notes : *Selective δ-opioid receptor antagonist.*

References : Portoghese, PS *Trends Pharmacol Sci* **1989**, *10*, 230-5.



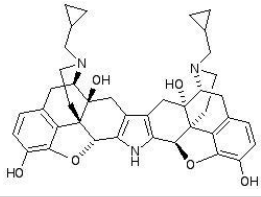
Catalog number : NOCD-067 **CASRN :** 113158-35-3

Name : Norbinaltorphimine dihydrochloride; norBNI

Mol. formula : $C_{40}H_{45}Cl_2N_3O$ **FW :** 734.73 **DEA schedule :** 0

Notes : *Selective κ-opioid antagonist.*

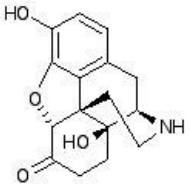
References : Birch, PJ; *et al. Eur J Pharmacol* **1987**, *144*, 405-8.
Portoghese, PS; Lipkowski, AW; Takemori, AE *Life Sci* **1987**, *40*, 1287-92.



Catalog number : 9652-006

Name : (-)-Noroxymorphone

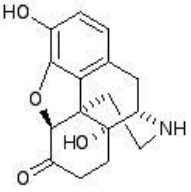
Mol. formula : $C_{16}H_{17}NO_4$ **FW :** 287.30 **DEA schedule :** 2



Catalog number : 9652-007

Name : (+)-Noroxymorphone; (+)-14-Hydroxydihydronormorphinone

Mol. formula : $C_{16}H_{17}NO_4$ **FW :** 287.30 **DEA schedule :** 2



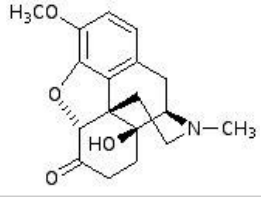
Catalog number : 9143-002 **CASRN :** 124-90-3

Name : Oxycodone hydrochloride; Dihydrohydroxycodeinone hydrochloride

Mol. formula : $C_{18}H_{22}ClNO_4$ **FW :** 351.84 **DEA schedule :** 2

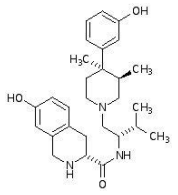
Notes : *Narcotic analgesic*

References : *Merck Index*, 14th ed., Monograph 6959.



Opioids: Phenylpiperidine Class

Catalog number : NOCD-056 **CASRN :** 785835-79-2



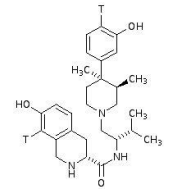
Name : JDTic dihydrochloride

Mol. formula : $C_{28}H_{41}Cl_2N_3O_3$ **FW :** 538.56 **DEA schedule :** 0

Notes : *Selective kappa-opioid antagonist.*

References : Thomas, JB; Atkinson, RN; Rothman, RB; Fix, SE; Mascarella, SW; Vinson, NA; Xu, H; Dersch, CM; Lu, Y; Cantrell, BE; Zimmerman, DM; Carroll, FI *J Med Chem* **2001**, *44*, 2687-90.

Catalog number : NOCD-059



Name : [^{3}H]JDTic

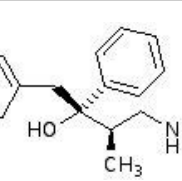
Mol. formula : $C_{28}H_{39}N_3O_3$ **FW :** 469.64 **DEA schedule :** 0

Notes : *Selective kappa-opioid antagonist (tritium-labeled).*

References : Thomas, JB; *et al.* J Med Chem **2001**, *44*, 2687-90.

Opioids: Propoxyphene Class

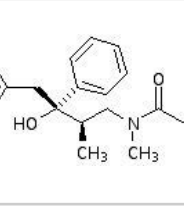
Catalog number : 9273-011



Name : (+)-α-Norpropoxyphene maleate

Mol. formula : $C_{25}H_{31}NO_6$ **FW :** 441.53 **DEA schedule :** 0

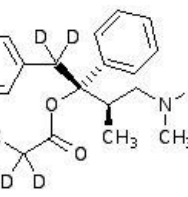
Catalog number : 9273-010



Name : (+)-α-N-Propionylnorpropoxyphene

Mol. formula : $C_{21}H_{27}NO_2$ **FW :** 325.45 **DEA schedule :** 0

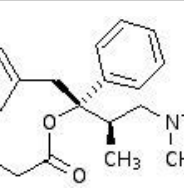
Catalog number : 9273-004



Name : [$^2H_7$]Propoxyphene hydrochloride

Mol. formula : $C_{22}H_{29}NO_2$ **FW :** 346.51 **DEA schedule :** 2

Catalog number : 9273-002



Name : (+)-α-Propoxyphene hydrochloride; Darvon hydrochloride

Mol. formula : $C_{22}H_{30}ClNO_2$ **FW :** 375.94 **DEA schedule :** 2

Notes : *Narcotic analgesic*

References : Miller, RR *Am J Hosp Pharm* **1977**, *34*, 413-23.
Barkin, RL; Barkin SJ; Barkin DS *Am J Ther* **2006**, *13*, 534-42.

Opioids: Thebaine Class

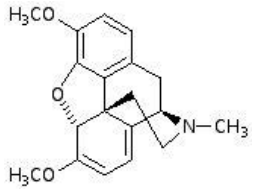
Catalog number : 9333-002 **CASRN :** 115-37-7

Name : Thebaine base

Mol. formula : $C_{19}H_{21}NO_3$ **FW :** 311.36 **DEA schedule :** 2

Notes : *Opiate; synthetic starting material for many opiate compounds*

References : *Merck Index*, 14th ed., Monograph 9276.



Opioids (dosage form): Implantable

Catalog number : 9250-014

Name : Methadone HCl implant pellets

DEA schedule : 2

Dosage Form

Catalog number : 9300-008

Name : Morphine base implant pellets

DEA schedule : 2

Dosage Form

Catalog number : 9300-009

Name : Placebo for morphine base implant pellets

DEA schedule : 0

Dosage Form

Catalog number : 9652-021

Name : Naltrexone base implant pellets

DEA schedule : 0

Dosage Form

Catalog number : 9652-022

Name : Placebo for naltrexone implant pellets

DEA schedule : 0

Dosage Form

(All peptides prepared using solution-phase methods.)

Peptides: Caged

Catalog number : MPSP-118

Name : CNB-Y-DYN8 (CYD8)

Sequence : H-(Carboxynitrobenzyl)Tyr-Gly-Gly-Phe-Leu- Arg-Arg-Ile-OH

Mol. Formula : $C_{54}H_{77}N_{15}O_{14}$ **FW :** 1159.31

Note : *Photoactivatable analog of Dynorphin A (1-8).*

Reference: Banghart, MR; Sabatini BL, *Neuron* **2012**, *73*, 249-59.

Catalog number : MPSP-117

Name : CNB-Y-LE (CYLE)

Sequence : H-(Carboxynitrobenzyl)Tyr-Gly-Gly-Phe-Leu-OH

Mol. Formula : $C_{36}H_{42}N_6O_{11}$ **FW :** 734.76

Note : *Photoactivatable analog of Leu-enkephalin.*

Reference: Banghart, MR; Sabatini BL, *Neuron* **2012**, *73*, 249-59.

Catalog number : MPSP-119

Name : CNV-Y-LE

Sequence : H-(Carboxynitroveratryl)Tyr-Gly-Gly-Phe-Leu-OH

Mol. Formula : $C_{38}H_{46}N_6O_{13}$ **FW :** 794.70

Note : *Photoactivatable analog of Leu-enkephalin.*

Reference: Russell, AG; et al., *J Org Chem* **2010**, *75*, 4648-4651.
Russell, AG; et al., *Photochem Photobiol Sci* **2012**, *11*, 556-563.

Peptides: Cannabinoid-related

Catalog number : MPSP-090

Name : Hemopressin

Sequence : H-Pro-Val-Asn-Phe-Lys-Phe-Leu-Ser-His-OH

Mol. Formula : $C_{53}H_{77}N_{13}O_{12}$ **FW :** 1088.3

Note : *CB_1 cannabinoid receptor inverse agonist. Analgesic.*

Reference : Heimann, AS; *et al. Proc Natl Acad Sci USA* **2007**, *104*, 20588-93.

Catalog number : PEPT-053

Name : Hemopressin *tris*(trifluoroacetate)

Sequence : H-Pro-Val-Asp-Phe-Lys-Phe-Leu-Ser-His

Mol. Formula : $C_{59}H_{81}F_9N_{13}O_{18}$ **FW :** 1431.36

Note : *CB_1 cannabinoid receptor inverse agonist. Analgesic.*

Reference : Heimann, AS; *et al. Proc Natl Acad Sci USA* **2007**, *104*, 20588-93.

Catalog number : MPSP-096

Name : [$^3H_2$]Hemopressin

Sequence : H-Pro-Val-Asn-[^{3}H]Phe-Lys-[^{3}H]Phe-Leu-Ser-His-OH

Mol. Formula : $C_{53}H_{77}N_{13}O_{12}$ **FW :** 1092.3

Note : *Radiolabeled hemopressin (MPSP-90; PEPT-053).*

Catalog number : MPSP-091

Name : [$^3H_4$]Hemopressin

Sequence : H-[$^3H_2$]Pro-Val-Asn-[^{3}H]Phe-Lys-[^{3}H]Phe-Leu-Ser-His-OH

Mol. Formula : $C_{53}H_{77}N_{13}O_{12}$ **FW :** 1096.3

Note : *Radiolabeled hemopressin (MPSP-90; PEPT-053).*

Catalog number : MPSP-098

Name : ABz-Hemopressin

Sequence : 2-ABz-Pro-Val-Asn-Phe-Lys-Phe-Leu-Ser-His-OH

Mol. Formula : $C_{60}H_{82}N_{14}O_{13}$ **FW :** 1207.1

Note : *Hemopressin analog (MPSP-90; PEPT-053).*

Catalog number : MPSP-099

Name : K^5-ABz-Hemopressin

Sequence : H-Pro-Val-Asn-Phe-Lys(2-ABz)-Phe-Leu-Ser-His-OH

Mol. Formula : $C_{60}H_{82}N_{14}O_{13}$ **FW :** 1207.1

Note : *Hemopressin analog (MPSP-90; PEPT-053).*

Catalog number : MPSP-100

Name : Asp^3-Hemopressin

Sequence : H-Pro-Val-Asp-Phe-Lys-Phe-Leu-Ser-His-OH

Mol. Formula : $C_{53}H_{76}N_{12}O_{13}$ **FW :** 1089.3

Note : *Hemopressin analog (MPSP-90; PEPT-053).*

Catalog number : MPSP-094

Name : DIT^{7}-Hemopressin (1-6)

Sequence : H-Pro-Val-Asn-Phe-Lys-Phe-Tyr(3,5-diiodo)-OH

Mol. Formula : $C_{47}H_{61}N_9O_{10}I_2$ **FW :** 1165.9

Note : *Hemopressin analog (MPSP-90; PEPT-053).*

Catalog number : MPSP-101

Name : D-His^{9}-Hemopressin

Sequence : H-Pro-Val-Asn-Phe-Lys-Phe-Leu-Ser-D-His-OH

Mol. Formula : $C_{53}H_{77}N_{13}O_{12}$ **FW :** 1088.3

Note : *Hemopressin analog (MPSP-90; PEPT-053).*

Catalog number : PEPT-054

Name : Leu^{6}-Hemopressin

Sequence : H-Pro-Val-Asn-Phe-Lys-Leu-Leu-Ser-His-OH

Mol. Formula : $C_{50}H_{79}N_{13}O_{12}$ **FW :** 1054.26

Note : *CB_1 cannabinoid receptor antagonist.*

Reference : Gomes *et al.*, The FASEB Journal, *23*, 1 (**2009**)

Catalog number : MPSP-097

Name : [^{3}H]Leu^{6}-Hemopressin

Sequence : H-Pro-Val-Asn-[^{3}H]Phe-Lys-Leu-Leu-Ser-His-OH

Mol. Formula : $C_{50}H_{79}N_{13}O_{12}$ **FW :** 1056.3

Note : *Radiolabeled Leu^{6}-Hemopressin (PEPT-054).*

Catalog number : MPSP-105

Name : RVD-Hemopressin

Sequence : H-Arg-Val-Asp-Pro-Val-Asn-Phe-Lys-Phe-Leu-Ser-His-OH

Mol. Formula : $C_{68}H_{103}N_{19}O_{17}$ **FW :** 1458.7

Note : *Agonist of CB_1 cannabinoid receptors.*

Reference : Gomes et al., FASEB J. 2009; 23(9): 3020-9

Catalog number : PEPT-057

Name : RVD-Leu^{6}-Hemopressin *tetrakis*(trifluoroacetate)

Sequence : H-Arg-Val-Asp-Pro-Val-Asn-Phe-Lys-Leu-Leu-Ser-His-OH

Mol. Formula : $C_{65}H_{105}N_{19}O_{17} \bullet 4\ CF_3CO_2H$ **FW :** 1880.75

Note : *N-terminal extended hemopressin, CB1 receptor agonist.*

Reference : Dale, C. S.; Pagano Rde, L.; Rioli, V.; Hyslop, S.; Giorgi, R.; Ferro, E. S., *Peptides*, **26**, 431 (2005).
Gomes, I.; Grushko, J. S.; Golebiewska, U.; Hoogendoorn, S.; Gupta, A.; Heimann, A. S.; Ferro, E. S.; Scarlata, S.; Fricker, L. D.; Devi, L. A., *FASEB J*, **23**, 3020 (2009).

Catalog number : MPSP-107

Name : RVD-Hemopressin (1-7)

Sequence : H-Arg-Val-Asp-Pro-Val-Asn-Phe-Lys-Phe-Leu-OH

Mol. Formula : $C_{59}H_{91}N_{15}O_{14}$ **FW :** 1234.5

Note : *RVD-Hemopressin analog (MPSP-105; PEPT-057).*

Catalog number : MPSP-092

Name : Tyr^7-Hemopressin (1-6)

Sequence : H-Pro-Val-Asn-Phe-Lys-Phe-Tyr-OH

Mol. Formula : $C_{47}H_{63}N_9O_{10}$ **FW :** 914.1

Note : *Analog of MPSP-090.*

Catalog number : MPSP-093

Name : $[^3H_2]Tyr^7$-Hemopressin (1-6)

Sequence : H-Pro-Val-Asn-Phe-Lys-Phe-$[^3H_2]$Tyr-OH

Mol. Formula : $C_{47}H_{61}N_9O_{103}H_2$ **FW :** 918.1

Note : *Radioligand for MPSP-092.*

Catalog number : MPSP-103

Name : VD-Hemopressin

Sequence : H-Val-Asp-Pro-Val-Asn-Phe-Lys-Phe-Leu-Ser-His-OH

Mol. Formula : $C_{62}H_{91}N_{15}O_{16}$ **FW :** 1302.5

Note : *Agonist of CB_1 cannabinoid receptors.*

Reference : Gomes et al., FASEB J. 2009; 23(9): 3020-9.

Catalog number : PEPT-055

Name : $VD-Leu^6$-Hemopressin

Sequence : H-Val-Asp-Pro-Val-Asn-Phe-Lys-Leu-Leu-Ser-His-OH

Mol. Formula : $C_{59}H_{93}N_{15}O_{16}$ **FW :** 1268.1

Note : *CB_1 cannabinoid receptor antagonist.*

Reference : Gelman *et al.*, J. Neurochem., *113*, 871 (**2010**)

Peptides: Nicotinic Class

Catalog number : PEPT-058

Name : α-Conotoxin MII *tris*(trifluoroacetate)

Sequence : H-Gly-Cys-Cys-Ser-Asn-Pro-Val-Cys-His-Leu-Glu-His-Ser-Asn-Leu-Cys-NH_2 (disulfide bonds Cys2-Cys8, Cys3-Cys16)

Mol. Formula : $C_{67}H_{103}N_{23}O_{22}S_4 \bullet 3\ CF_3CO_2H$ **FW :** 2053.02

Note : *Highly potent and selective α3β2 nicotinic receptor antagonist.*

Reference : Cartier, G.; Yoshikami, D.; Gray, W.; Luo, S.; Olivera, B.; McIntosh, J., *Journal of Biological Chemistry*, **271**, 7522 (1966). Hill, J. M.; Oomen, C. J.; Miranda, L. P.; Bingham, J. P.; Alewood, P. F.; Craik, D. J., *Biochemistry*, **37**, 15621 (1998).

Catalog number : MPSP-109

Name : ω-Conotoxin GVIA

Sequence : H-Cys-Lys-Ser-Hyp-Gly-Ser-Ser-Cys-Ser-Hyp-Thr-Ser-Tyr-Asn-Cys-Cys-Arg-Ser-Cys-Asn-Hyp-Tyr-Thr-Lys-Arg-Cys-Tyr-NH_2 (disulfide bonds Cys1-Cys16, Cys8-Cys19, Cys15-Cys26)

Mol. Formula : $C_{120}H_{182}N_{38}O_{43}S_6$ **FW :** 3037.4

Note : *ω-Conotoxin GVIA, extracted from the venom of the fish-hunting cone snail Conus geographus is a neuronal calcium channel blocker.*

Reference : B.M. Olivera et al., Biochemistry 26, 2086 (1987); D.R. Hillyard et al., Neuron 9, 69 (1992); K. Sato et al., Biochem. Biophys. Res. Commun. 194, 1292 (1993); J.R. Abbott et al., Int. J. Devl Neurosci. 12, 43 (1994)

Catalog number : MPSP-111

Name : ω-Conotoxin MVIIA

Sequence : H-Cys-Lys-Gly-Lys-Gly-Ala-Lys-Cys-Ser-Arg-Leu-Met-Tyr-Asp-Cys-Cys-Thr-Gly-Ser-Cys-Arg-Ser-Gly-Lys-Cys-NH_2 (disulfide bonds Cys1-Cys16, Cys8-Cys20, Cys15-Cys25)

Mol. Formula : $C_{102}H_{172}N_{36}O_{32}S_7$ **FW :** 2639.2

Note : *ω-Conotoxin MVIIA, extracted from the venom of the fish-hunting cone snail Conus magus is a neuronal calcium channel blocker.*

Reference : B.M. Olivera et al., Biochemistry 26, 2086 (1987); D.R. Hillyard et al., Neuron 9, 69 (1992); J.R. Abbott et al., Int. J. Devl Neurosci. 12, 43 (1994); R. Newcomb et al., Brain Res. 638, 95 (1994)

Catalog number : MPSP-113

Name : ω-Conotoxin MVIIC

Sequence : H-Cys-Lys-Gly-Lys-Gly-Ala-Pro-Cys-Arg-Lys-Thr-Met-Tyr-Asp-Cys-Cys-Ser-Gly-Ser-Cys-Gly-Arg-Arg-Gly-Lys-Cys-NH_2 (disulfide bonds Cys1-Cys16, Cys8-Cys20, Cys15-Cys26)

Mol. Formula : $C_{106}H_{178}N_{40}O_{32}S_7$ **FW :** 2749.3

Note : *ω-Conotoxin MVIIC, extracted from the venom of the fish-hunting cone snail Conus magus is a neuronal calcium channel blocker.*

Reference : D.R. Hillyard et al., Neuron 9, 69 (1992); R. Newcomb et al., Brain Res. 638, 95 (1994)

Peptides: Opioid

Catalog number : PEPT-042

Name : Biphalin trifluoroacetate/acetate

Sequence : H-Tyr-D-Ala-Gly-Phe-NH-Tyr-D-Ala-Gly-Phe-NH_2

Mol. Formula : $C_{50}H_{58}\cdot_3F_{5}\cdot_7N_{10}O_{14}$ **FW :** 1120.26

Note : *Synthetic dimeric enkephalin having potent agonist activity at μ and δ receptors.*

Reference : Lipkowski, AW*; et al. Life Sci* **1987**, *40*, 2283-8.
Li, G*; et al. Bioorg Med Chem Lett* **1998**, *8*, 555-60.

Catalog number : PEPT-015

Name : N-(*tert*-Butyloxycarbonyl)tyrosyl-D-alanylglycyl-Nα-methylphenylalanylglycine methyl ester

Sequence : Boc-Tyr-D-Ala-N^{α}-Me-Phe-Gly-OCH_3

Mol. Formula : $C_{32}H_{43}N_5O_9$ **FW :** 641.72

Catalog number : PEPT-022

Name : N-(*tert*-Butyloxycarbonyl)tyrosyl-O-tert-butyl-D-threonylglycylphenylalanylleucine hydrazide

Sequence : Boc-Tyr(Bu^t)-D-Thr-Gly-Phe-Leu-NH-NH_2

Mol. Formula : $C_{39}H_{59}N_7O_9$ **FW :** 769.95

Catalog number : PEPT-060

Name : CJ-15,208

Sequence : [c(Phe^1-D-Pro^2-Phe^3-Trp^4)]

Mol. Formula : $C_{34}H_{35}N_5O_4 \bullet CF_3CO_2H$ **FW :** 691.70

Note : *Kappa-opioid receptor antagonist. Peptide content 63%.*

Reference: Ross, NC; et al., *Tetrahedron Lett.* **2010**, *51*, 5020-5023.

Catalog number : PEPT-061

Name : D-Trp^4-CJ-15,208

Sequence : [c(Phe^1-D-Pro^2-Phe^3-D-Trp^4)]

Mol. Formula : $C_{34}H_{35}N_5O_4 \bullet CF_3CO_2H$ **FW :** 691.70

Note : *Kappa-opioid receptor antagonist. Peptide content 54%.*

Reference: Ross, NC; et al., *Tetrahedron Lett.* **2010**, *51*, 5020-5023.

Catalog number : MPSP-013

Name : CTAP

Sequence : H-D-Phe-c[Cys-Tyr-D-Trp-Arg-Thr-Pen]-Thr-NH_2

Mol. Formula : $C_{51}H_{69}N_{13}O_{11}S_2$ **FW :** 1103.0

Note : *Cyclic somatostatin analog with high μ selectivity.*

Reference : Pelton, JT*; et al. J Med Chem* **1986**, *29*, 2370-5.
Bilsky, EJ*; et al. J Pharmacol Exp Ther* **1996**, *277*, 484-90.

Catalog number : MPSP-014

Name : [^{3}H]CTAP

Sequence : H-D-Phe[^{3}H]-c[Cys-Tyr-D-Trp-Arg-Thr-Pen]-Thr-NH_2

Mol. Formula : $C_{51}H_{68}N_{13}O_{11}S_{23}H$ **FW :** 1105.0

Note : *Radioactive ligand for MPSP-013*

Reference : Abbruscato, TJ*; et al. J Pharmacol Exp Ther* **1997**, *280*, 402-9.

Catalog number : MPSP-054

Name : CTOP

Sequence : H-D-Phe-c[Cys-Tyr-D-Trp-Orn-Thr-Pen]-Thr-NH_2

Mol. Formula : $C_{50}H_{67}N_{11}O_{11}S_2$ **FW :** 1062.4

Note : *Cyclic somatin analog with high μ selectivity.*

Reference : Gulya, K*; et al. Life Sci* **1986**, *38*, 2221-9.
Pelton, JT*; et al. J Med Chem* **1986**, *29*, 2370-5.

Catalog number : MPSP-006

Name : DADLE

Sequence : H-Tyr-D-Ala-Gly-Phe-D-Leu-OH

Mol. Formula : $C_{29}H_{39}N_5O_7$ **FW :** 569.7

Note : *Synthetic enkephalin agonist having improved biological stability and some selectivity for the δ receptor over the μ receptor. It shows roughly the same anti-nociceptive activity as β-endorphin.*

Reference : Chang, KJ; Cuatrecasas P *J Biol Chem* **1979**, *254*, 2610-8.
Gorin, FA*; et al. J Med Chem* **1980**, *23*, 1113-22.
Knapp, RJ; Yamamura HI *Biochem Pharmacol* **1992**, *44*, 1687-95.

Catalog number : PEPT-001

Name : DADLE hydrochloride; [D-Ala^2,D-Leu^5]Enkephalin

Sequence : H-Tyr-D-Ala-Gly-Phe-D-Leu-OH

Mol. Formula : $C_{29}H_{40}ClN_5O_7$ **FW :** 606.12

Note : *Synthetic enkephalin agonist having improved biological stability and some selectivity for the δ receptor over the μ receptor.*

Reference : Chang, KJ; Cuatrecasas, PJ *J Biol Chem* **1979**, 254, 2610.
Gorin, FA; *et al. J Med Chem* **1980**, *23*, 1113.
Knapp, RJ; Yamamura, HI *Biochem Pharmacol* **1992**, *44*, 1687.

Catalog number : MPSP-007

Name : [$^3H_2$]DADLE

Sequence : H-Tyr[$^3H_2$]-D-Ala-Gly-Phe-D-Leu-OH

Mol. Formula : $C_{29}H_{37}N_5O_{73}H_2$ **FW :** 573.7

Note : *Tritiated DADLE*

Reference : Luciano, MG; *et al. Brain Res Bull* **1981**, *7*, 677-82.

Catalog number : PEPT-008

Name : DALA hydrochloride

Sequence : H-Tyr-D-Ala-Gly-Phe-Met-NH_2

Mol. Formula : $C_{28}H_{39}ClN_6O_6S$ **FW :** 623.17

Note : *Potent, long-lasting analog of [Met5]enkephalin.*

Reference : Pert, CB; *et al. Science* **1976**, *194*, 330.

Catalog number : MPSP-034

Name : DALCE

Sequence : H-Tyr-D-Ala-Gly-Phe-Leu-Cys-OH

Mol. Formula : $C_{32}H_{43}N_6O_8S$ **FW :** 673.0

Note : *Irreversible antagonist for the δ1 receptor.*

Reference : Bowen, WD, *et al. J Biol Chem* **1987**, *262*, 13434-9.
Traynor, JR; Elliott, J *TIPS* **1993**, *14*, 84.

Catalog number : MPSP-035

Name : [$^3H_2$]DALCE

Sequence : H-Tyr[$^3H_2$]-D-Ala-Gly-Phe-Leu-Cys-OH

Mol. Formula : $C_{33}H_{44}N_6O_{10}S_3H_2$ **FW :** 677.0

Note : *Radioactive ligand for MPSP-034*

Catalog number : PEPT-035

Name : DALCE trifluoroacetate

Sequence : Tyr-D-Ala-Gly-Phe-Leu-Cys-OH

Mol. Formula : $C_{34}H_{45}F_3N_6O_{10}S$ **FW :** 786.82

Note : *Irreversible antagonist for the δ1 receptor.*

Reference : Bowen, WD; *et al. J Biol Chem* **1987**, *262*, 13434-9.
Traynor, JR; Elliott, J *TIPS* **1993**, *14*, 84.

Catalog number : MPSP-027

Name : DALDA

Sequence : H-Tyr-D-Arg-Phe-Lys-NH_2

Mol. Formula : $C_{30}H_{45}N_9O_5$ **FW :** 611.8

Note : *Synthetic tetrapeptide agonist highly selective for the μ receptor.*

Reference : Schiller, PW*; et al. J Med Chem* **1989**, *32*, 698-703.

Catalog number : MPSP-084

Name : $(DMT)^1$-DALDA

Sequence : H-DMT-D-Arg-Phe-Lys-NH_2

Mol. Formula : $C_{32}H_{49}N_9O_5$ **FW :** 639.6

Note : *Super DALDA*

Reference : Zhao, K; *et al. J Biol Chem* **2004**, *279*, 34682-90.

Catalog number : PEPT-038

Name : DALDA *tris*(trifluoroacetate)

Sequence : H-Tyr-D-Arg-Phe-Lys-NH_2

Mol. Formula : $C_{36}H_{48}F_9N_9O_{11}$ **FW :** 611.75

Note : *Synthetic tetrapeptide agonist highly selective for the μ receptor.*

Reference : Schiller, PW; *et al. J Med Chem* **1989**, *32*, 698.

Catalog number : PEPT-047

Name : Super DALDA; SS-02; [Dmt1]DALDA *tris*(trifluoroacetate)

Sequence : Dmt-D-Arg-Phe-Lys-NH_2

Mol. Formula : $C_{38}H_{52}F_9N_9O_{11}$ **FW :** 981.354

Reference : Zhao, K*; et al. J Biol Chem* **2004**, *279*, 34682-90.
Schiller, PW*; et al. Eur J Med Chem* **2000**, *35*, 895-901.

Catalog number : MPSP-028

Name : $[^3H_2]$DALDA

Sequence : H-Tyr$[^3H_2]$-D-Arg-Phe-Lys-NH_2

Mol. Formula : $C_{30}H_{43}N_9O_{53}H_2$ **FW :** 615.8

Note : *Radioactive ligand for MPSP-027*

Catalog number : MPSP-011

Name : DAMGO

Sequence : H-Tyr-D-Ala-Gly-N^{α}-Me-Phe-Gly-ol

Mol. Formula : $C_{26}H_{35}N_5O_6$ **FW :** 513.7

Note : *Synthetic enkephalin agonist highly selective for the μ receptor.*

Reference : Handa, BK; *et al. Eur J Pharmacol* **1981**, *70*, 531-40.
Kosterlitz, HW; Paterson SJ; Robson LE *Br J Pharmacol* **1981**, *73*, 939-49.
Reddy, PA; *et al. Org Prep Proc Internat* **1995**, *27*, 469.

Catalog number : PEPT-014

Name : DAMGO trifluoroacetate

Sequence : Tyr-D-Ala-Gly-N^{α}-Me-Phe-Gly-ol

Mol. Formula : $C_{28}H_{36}F_3N_5O_8$ **FW :** 627.62

Note : *Synthetic enkephalin agonist highly selective for the μ receptor.*

Reference : Handa, BK; *et al. EurJPharmacol* **1981**, *70*, 531.
Kosterlitz, HW; Paterson, SJ *Br J Pharmacol* **1981**, *73*, 299P.
Reddy, PA; *et al. Org Prep Proc Internat* **1995**, *27*, 469.

Catalog number : MPSP-012

Name : [$^3H_2$]DAMGO

Sequence : H-Tyr[$^3H_2$]-D-Ala-Gly-N^{α}-Me-Phe-Gly-ol

Mol. Formula : $C_{26}H_{33}N_5O_{63}H_2$ **FW :** 517.7

Note : *Radioactive ligand for MPSP-011*

Reference : Zajac, JM; Roques BP *Life Sci* **1983**, *33 Suppl 1*, 155-8.

Catalog number : MPSP-030

Name : Deltorphin I

Sequence : H-Tyr-D-Ala-Phe-Asp-Val-Val-Gly-NH_2

Mol. Formula : $C_{37}H_{52}N_8O_{10}$ **FW :** 768.9

Note : *Selective δ receptor agonist isolated form the skin of Phyllomedusa bicolor*

Reference : Amodeo, P; *et al. Pept Res* **1992**, *5*, 48-55.
Melchiorri, P; *et al. Eur J Pharmacol* **1991**, *195*, 201-7.
Salvadori, S; *et al. J Med Chem* **1991**, *34*, 1656-61.
Lazarus, LH; *et al. J Med Chem* **1991**, *34*, 1350-5.

Catalog number : PEPT-033

Name : Deltorphin I hemitrifluoroacetate

Sequence : Tyr-D-Ala-Phe-Asp-Val-Val-Gly-NH_2

Mol. Formula : $C_{37}H_{52}N_8O_{10}$ **FW :** 768.87

Note : *Selective δ receptor agonist isolated from the skin of Phyllomedusa bicolor.*

Reference : Erspamer, V; *et al. Proc Natl Acad Sci USA* **1989**, *86*, 5188.
Salvadori, S; *et al. J Med Chem* **1991**, *34*, 1656.
DLHeyl and SESchullery, CurrMedChem., 4, 117 (1997).

Catalog number : MPSP-031

Name : [$^3H_2$]Deltorphin I

Sequence : H-Tyr[$^3H_2$]-D-Ala-Phe-Asp-Val-Val-Gly-NH_2

Mol. Formula : $C_{37}H_{50}N_8O_{103}H_2$ **FW :** 772.9

Note : *Radioactive ligand for MPSP-030*

Reference : Erspamer, V; *et al. Proc Natl Acad Sci USA* **1989**, *86*, 5188.

Catalog number : MPSP-036

Name : Deltorphin II

Sequence : H-Tyr-D-Ala-Phe-Glu-Val-Val-Gly-NH_2

Mol. Formula : $C_{38}H_{54}N_8O_{10}$ **FW :** 782.9

Note : *A selective δ-opioid receptor agonist isolated form the skin of Phyllomedusa bicolor*

Reference : Amodeo, P*; et al. Pept Res* **1992**, *5*, 48-55.
Melchiorri, P*; et al. Eur J Pharmacol* **1991**, *195*, 201-7.
Salvadori, S*; et al. J Med Chem* **1991**, *34*, 1656-61.
Lazarus, LH*; et al. J Med Chem* **1991**, *34*, 1350-5.

Catalog number : PEPT-034

Name : Deltorphin II trifluoroacetate

Sequence : Tyr-D-Ala-Phe-Glu-Val-Val-Gly-NH_2

Mol. Formula : $C_{40}H_{55}F_3N_8O_{12}$ **FW :** 896.92

Note : *Selective δ2 receptor agonist isolated from the skin of Phyllomedusa bicolor.*

Reference : Erspamer, V; *et al. Proc Natl Acad Sci USA* **1989**, *86*, 5188.
Salvadori, S; *et al. J Med Chem* **1991**, *34*, 1656.
Traynor, JR; Elliott, J *TIPS* **1993**, *14*, 84.

Catalog number : MPSP-037

Name : [$^3H_2$]Deltorphin II

Sequence : H-Tyr[$^3H_2$]-D-Ala-Phe-Glu-Val-Val-Gly-NH_2

Mol. Formula : $C_{38}H_{52}N_8O_{103}H_2$ **FW :** 786.9

Note : *Radioactive ligand for MPSP-036*

Reference : Erspamer, V; *et al. Proc Natl Acad Sci USA* **1989**, *86*, 5188.

Catalog number : PEPT-037

Name : Dermorphin trifluoroacetate

Sequence : Tyr-D-Ala-Phe-Gly-Tyr-Pro-Ser-NH_2

Mol. Formula : $C_{42}H_{51}F_3N_8O_{12}$ **FW :** 916.91

Note : *Selective μ receptor agonist isolated from the skin of Phyllomedusa sauvagei.*

Reference : Montecucchi, PC; *et al. Int J Peptide Protein Res* **1981**, *17*, 275.
Melchiorri, P; Negri, L *Gen Pharmac* **1996**, *27*, 1099.

Catalog number : PEPT-049

Name : 2',6'-Dimethyltyrosyl-Ng-nitro-D-arginylphenylalanyl-Ne-2-Cl-Cbz-lysinamide trifluoroacetate

Sequence : Dmt-D-Arg(NO_2)-Phe-Lys(2-Cl-Cbz)-NH_2

Mol. Formula : $C_{42}H_{55}ClF_3N_{10}O_{11}$ **FW :** 949.376

Reference : Zhao, K; *et al. J Biol Chem* **2004**, *279*, 34682-90.

Catalog number : PEPT-048

Name : 2',6'-Dimethyltyrosyl-Ng-nitro-D-arginylphenylalanyllysinamide trifluoroacetate

Sequence : Dmt-D-Arg(NO_2)-Phe-Lys-NH_2

Mol. Formula : $C_{36}H_{50}F_6N_{10}O_{11}$ **FW :** 944.2

Reference : Zhao, K; *et al. J Biol Chem* **2004**, *279*, 34682-90.

Catalog number : PEPT-046

Name : DIPP-NH_2[Ψ] *bis*(Trifluoroacetate)

Sequence : 2TFA •Dmt-TicΨ[CH_2NH]Phe-Phe-NH_2

Mol. Formula : $C_{43}H_{47}F_6N_5O_8$ **FW :** 875.85

Note : *Synthetic high potency pseudopeptide having balanced μ agonist/δ antagonist properties.*

Reference : Schiller, PW; *et al. J Med Chem* **1999**, *42*, 3520-6.

Catalog number : MPSP-001

Name : DPDPE

Sequence : H-Tyr-c[D-Pen-Gly-Phe-D-Pen]-OH

Mol. Formula : $C_{30}H_{39}N_7O_5S_2$ **FW :** 645.8

Note : *Synthetic, conformationally restricted enkephalin agonist selective for the δ1 receptor. Minimal cross-reactivity with μ- and κ- receptors.*

Reference : Mosberg, HI; *et al. Proc Natl Acad Sci USA* **1983**, *80*, 5871-4.
Akiyama, K; *et al. Proc Natl Acad Sci USA* **1985**, *82*, 2543-7.
Mosberg, HI; Omnaas JR; Goldstein A *Mol Pharmacol* **1987**, *31*, 599-602.
Knapp, RJ; Yamamura HI *Biochem Pharmacol* **1992**, *44*, 1687-95.

Catalog number : MPSP-044

Name : *p*-Cl-Phe-DPDPE

Sequence : H-Tyr-c[D-Pen-Gly-4-Cl-Phe-D-Pen]-OH

Mol. Formula : $C_{30}H_{38}ClN_5O_7S_2$ **FW :** 680.4

Note : *Analog of DPDPE. δ-selectivity 5 times higher than DPDPE due to a 5-fold increased δ-receptor affinity.*

Reference : Toth, G; *et al. J Med Chem* **1990**, *33*, 249-53.
Vaughn, LK; *et al. Life Sci* **1989**, *45*, 1001-8.

Catalog number : PEPT-010

Name : DPDPE trifluoroacetate; [D-Pen^2,D-Pen^5]Enkephalin

Sequence : H-Tyr-c[D-Pen-Gly-Phe-D-Pen]-OH

Mol. Formula : $C_{32}H_{40}F_3N_5O_9S_2$ **FW :** 759.82

Note : *Synthetic, conformationally restricted enkephalin agonist selective for the δ1 receptor.*

Reference : Mosberg, HI*; et al. Proc Natl Acad Sci USA* **1983**, *80*, 5871-4.
Knapp, RJ; Yamamura, HI *Biochem Pharmacol* **1992**, *44*, 1687.
Traynor, JR; Elliott, J *TIPS* **1993**, *14*, 84.

Catalog number : MPSP-002

Name : [$^3H_2$]DPDPE

Sequence : H-Tyr[$^3H_2$]-c[D-Pen-Gly-Phe-D-Pen]-OH

Mol. Formula : $C_{30}H_{37}N_7O_5S_{23}H_2$ **FW :** 649.8

Note : *Radioactive ligand for MPSP-001*

Reference : Cotton, R*; et al. Eur J Pharmacol* **1984**, *97*, 331-2.

Catalog number : MPSP-045

Name : [$^3H_2$]*p*-Cl-Phe-DPDPE

Sequence : H-Tyr[$^3H_2$]-c[D-Pen-Gly-4-Cl-Phe-D-Pen]-OH

Mol. Formula : $C_{30}H_{36}ClN_5O_7S_{23}H_2$ **FW :** 684.4

Note : *Radioactive ligand for MPSP-044*

Catalog number : MPSP-086

Name : DV1.2.DA1.5.Lan.Enk.(DPDPE lanthionine analog)

Sequence : H-Tyr-[D-S(Val **L**-Gly-Phe-D-Ala) **L**]-OH

Mol. Formula : $C_{28}H_{35}N_5O_7S$ **FW :** 584.7

Note : *DPDPE lanthionine analog.*

Catalog number : MPSP-003

Name : DSLET

Sequence : H-Tyr-D-Ser-Gly-Phe-Leu-Thr-OH

Mol. Formula : $C_{33}H_{46}N_6O_{10}$ **FW :** 686.9

Note : *Synthetic enkephalin agonist selective for the δ2 receptor.*

Reference : Fournie-Zaluski, MC*; et al. Mol Pharmacol* **1981**, *20*, 484-91.
Traynor, JR; Elliott J *Trends Pharmacol Sci* **1993**, *14*, 84-6.

Catalog number : PEPT-039

Name : DSLET trifluoroacetate

Sequence : Tyr-D-Ser-Gly-Phe-Leu-Thr-OH

Mol. Formula : $C_{35}H_{47}F_3N_6O_{12}$ **FW :** 800.79

Note : *Synthetic enkephalin agonist selective for the δ2 receptor.*

Reference : Gacel, G; *et al. FEBS Lett* **1980**, *118*, 245.
Gacel, G; *et al. J Med Chem* **1981**, *24*, 1119.
Traynor, JR; Elliott, J *TIPS* **1993**, *14*, 84.

Catalog number : MPSP-004

Name : [$^3H_2$]DSLET

Sequence : H-Tyr[$^3H_2$]-D-Ser-Gly-Phe-Leu-Thr-OH

Mol. Formula : $C_{33}H_{44}N_6O_{103}H_2$ **FW :** 690.9

Note : *Radioactive ligand for MPSP-003*

Reference : David, M; *et al. Eur J Pharmacol* **1982**, *78*, 385-7.

Catalog number : MPSP-032

Name : DSTBULET

Sequence : H-Tyr-D-Ser(Bu^t)-Gly-Phe-Leu-Thr-OH

Mol. Formula : $C_{37}H_{44}N_6O_{10}$ **FW :** 742.9

Note : *Synthetic enkephalin agonist selective for the δ receptor*

Reference : Delay-Goyet, P; *et al. J Biol Chem* **1988**, *263*, 4124-30.
Gacel, G; *et al. J Med Chem* **1988**, *31*, 1891-7.

Catalog number : PEPT-043

Name : DSTBULET acetate

Sequence : H-Tyr-D-Ser(Bu^t)-Gly-Phe-Leu-Thr-OH

Mol. Formula : $C_{39}H_{58}N_6O_{12}$ **FW :** 802.92

Note : *Synthetic enkephalin agonist selective for the δ receptor.*

Reference : Delay-Goyet, P; *et al. J Biol Chem* **1988**, *263*, 4124-30.
Gacel, G; *et al. J Med Chem* **1988**, *31*, 1891-7.

Catalog number : MPSP-033

Name : [$^3H_2$]DSTBULET

Sequence : H-Tyr[$^3H_2$]-D-Ser(Bu^t)-Gly-Phe-Leu-Thr-OH

Mol. Formula : $C_{33}H_{44}N_6O_{103}H_2$ **FW :** 746.9

Note : *Radioactive ligand for MPSP-032*

Reference : Delay-Goyet, P *NIDA Res Mono* **1986**, *75*, 197-200.

Catalog number : MPSP-005

Name : DTLET

Sequence : H-Tyr-D-Ser-Gly-Phe-Leu-Thr-OH

Mol. Formula : $C_{34}H_{48}N_6O_{10}$ **FW :** 700.9

Note : *Synthetic enkephalin agonist moderately selective for the δ receptor.*

Reference : Zajac, JM*; et al. Biochem Biophys Res Commun* **1983**, *111*, 390-7.
Delay-Goyet, P*; et al. FEBS Lett* **1985**, *183*, 439-43.

Catalog number : PEPT-021

Name : DTLET trifluoroacetate

Sequence : Tyr-D-Thr-Gly-Phe-Leu-Thr-OH

Mol. Formula : $C_{36}H_{49}F_3N_6O_{12}$ **FW :** 814.81

Reference : Zajac, JM; *et al. Biochem Biophys Res Commun* **1983**, *111*, 390.
Delay-Goyet, P; *et al. FEBS Lett* **1985**, *183*, 439.

Catalog number : MPSP-088

Name : [(2*S*-Mdp]^1-Dyn NH_2 (1-11); Dynantin

Sequence : [(2*S*-Mdp]^1-Gly-Gly-Phe-Leu-Arg-Arg-Ile-Arg-Pro-Lys-NH_2

Mol. Formula : $C_{66}H_{109}N_{21}O_{12}$ **FW :** 1388.4

Note : *Highly and potent selective kappa antagonist.*

Reference : Lu, Y *et al. J Med Chem* **2001**, *44*, 3048-53.

Catalog number : PEPT-056

Name : Dynantin

Sequence : [2*S*]-Mdp-Gly-Gly-Phe-Leu-Arg-Arg-Ile-Arg-Pro-Lys-NH_2

Mol. Formula : $C_{66}H_{109}N_{21}O_{12} \bullet 4\ CF_3CO_2H$ **FW :** 1844.41

Note : *κ-Opioid antagonist.*

Reference : (1) Lu, Y.; *et al.*, *J Med Chem*, **2001**, *44*, 3048. (2) Schiller, P. W.; *et al.*, *Life Sci*, **2003**, *73*, 691.

Catalog number : MPSP-019

Name : Dynorphin (1-11)

Sequence : H-Tyr-Gly-Gly-Phe-Leu-Arg-Arg-Ile-Arg-Pro-Lys-OH

Mol. Formula : $C_{63}H_{103}N_{21}O_{13}$ **FW :** 1362.7

Note : *Truncated analog of dynorphin A with similar potency*

Catalog number : MPSP-020

Name : [$^3H_2$]Dynorphin (1-11)

Sequence : H-Tyr[$^3H_2$]-Gly-Gly-Phe-Leu-Arg-Arg-Ile-Arg-Pro-Lys-OH

Mol. Formula : $C_{63}H_{101}N_{21}O_{133}H_2$ **FW :** 1366.7

Note : *Radioactive ligand for MPSP-019*

Reference : Chavkin, C; Goldstein, A *Proc Natl Acad Sci USA* **1981**, *78*, 6543-7.

Catalog number : MPSP-016

Name : Dynorphin (1-13)

Sequence : H-Tyr-Gly-Gly-Phe-Leu-Arg-Arg-Ile-Arg-Pro-Lys-Leu-Lys-OH

Mol. Formula : $C_{75}H_{126}N_{24}O_{15}$ **FW :** 1604.2

Note : *Truncated analog of dynorphin A with similar potency*

Reference : Goldstein, A; *et al. Proc Natl Acad Sci USA* **1979**, *78*, 6666-70.

Catalog number : MPSP-017

Name : Dynorphin (1-13) amide

Sequence : H-Tyr-Gly-Gly-Phe-Leu-Arg-Arg-Ile-Arg-Pro-Lys-Leu-Lys-NH_2

Mol. Formula : $C_{75}H_{127}N_{25}O_{14}$ **FW :** 1603.2

Note : *Truncated amide analog of dynorphin A with similar potency*

Reference : Chavkin, C; Goldstein, A *Proc Natl Acad Sci USA* **1981**, *78*, 6543-7.

Catalog number : MPSP-018

Name : [$^3H_2$]Dynorphin (1-13) amide

Sequence : H-Tyr[$^3H_2$]-Gly-Gly-Phe-Leu-Arg-Arg-Ile-Arg-Pro-Lys-Leu-Lys-NH_2

Mol. Formula : $C_{75}H_{125}N_{25}O_{143}H_2$ **FW :** 1607.2

Note : *Radioactive ligand for MPSP-017*

Catalog number : MPSP-021

Name : Dynorphin (1-9)

Sequence : H-Tyr-Gly-Gly-Phe-Leu-Arg-Arg-Ile-Arg-OH

Mol. Formula : $C_{52}H_{84}N_{18}O_{11}$ **FW :** 1137.5

Note : *Selective ligand for κ-binding sites.*

Reference : Corbett, AD; *et al. Nature* **1982**, *299*, 79-81.
Yoshimura, K; *et al. J Pharmacol Exp Ther* **1982**, *222*, 71-9.

Catalog number : MPSP-022

Name : [$^3H_2$]Dynorphin (1-9)

Sequence : H-Tyr[$^3H_2$]-Gly-Gly-Phe-Leu-Arg-Arg-Ile-Arg-OH

Mol. Formula : $C_{52}H_{82}N_{18}O_{113}H_2$ **FW :** 1141.5

Note : *Radioactive ligand for MPSP-021*

Reference : Robson, LE*; et al. Life Sci* **1983**, *33 Suppl 1*, 283-6.
Wood, MS; Rodriguez FD; Traynor JR *Neuropharmacology* **1989**, *28*, 1041-6.

Catalog number : MPSP-048

Name : Dynorphin (2-11)

Sequence : H-Gly-Gly-Phe-Leu-Arg-Arg-Ile-Arg-Pro-Lys-OH

Mol. Formula : $C_{33}H_{44}N_6O_{10}$ **FW :** 1199.7

Note : *Dynorphin truncation which does not bind to opioid receptors*

Reference : Takemori, AE; Loh HH; Lee NM *J Pharmacol Exp Ther* **1993**, *266*, 121-4.
Meyer, ME *Pharmacol Biochem Behav* **1993**, *44*, 329-32.

Catalog number : MPSP-046

Name : Dynorphin (2-13)

Sequence : H-Gly-Gly-Phe-Leu-Arg-Arg-Ile-Arg-Pro-Lys-Leu-Lys-OH

Mol. Formula : $C_{66}H_{117}N_{23}O_{13}$ **FW :** 1441.1

Note : *Dynorphin truncation that does not bind to opioid receptors. Highly immunoreactive as the first tyrosine appears not to be essential for immunoreactivity.*

Reference : Young, EA*; et al. Peptides* **1987**, *8*, 701-7.
Walker, JM*; et al. Eur J Pharmacol* **1982**, *85*, 121-2.

Catalog number : MPSP-040

Name : Dynorphin (2-17)

Sequence : H-Gly-Gly-Phe-Leu-Arg-Arg-Ile-Arg-Pro-Lys-Leu-Lys-Trp-Asp-Asn-Gln-OH

Mol. Formula : $C_{90}H_{156}N_{30}O_{21}$ **FW :** 1984.8

Note : *Dynorphin truncation that does not bind to opioid receptors.*

Reference : Chavkin, C; Goldstein, A *Proc Natl Acad Sci USA* **1981**, *78*, 6543-6547.

Catalog number : MPSP-041

Name : [^3H]Dynorphin (2-17)

Sequence : H-Gly-Gly-Phe[^3H]-Leu-Arg-Arg-Ile-Arg-Pro-Lys-Leu-Lys-Trp-Asp-Asn-Gln-OH

Mol. Formula : $C_{90}H_{155}N_{30}O_{213}H$ **FW :** 1986.8

Note : *Radioactive ligand for MPSP-040*

Catalog number : MPSP-050

Name : Dynorphin A (1-8)

Sequence : H-Tyr-Gly-Gly-Phe-Leu-Arg-Arg-Ile-OH

Mol. Formula : $C_{46}H_{72}N_{14}O_{10}$ **FW :** 981.4

Note : *Endogenous peptide agonist for opioid receptors.*

Reference : Nakao, K*; et al. Biochem Biophys Res Commun* **1983**, *117*, 695-701.
Seizinger, BR*; et al. J Neurochem* **1984**, *42*, 447-57.
Bell, KM; Traynor JR *Can J Physiol Pharmacol* **1998**, *76*, 325-33.

Catalog number : MPSP-066

Name : [$^{3}\Psi^{4}$,D-Leu^{8}]Dynorphin A (1-8)amide

Sequence : H-Tyr-Gly-Gly-$\Psi(CH_2$-NH)-Phe-Leu-Arg-Arg-D-Leu-NH_2

Mol. Formula : $C_{33}H_{44}N_6O_{10}$ **FW :** 967.4

Note : *Kappa-selective dynorphin A analog*

Reference : Ambo, A; *et al. Chem Pharm Bull* **1995**, *43*, 1547-50.

Catalog number : MPSP-052

Name : Dynorphin A (2-8)

Sequence : H-Gly-Gly-Phe-Leu-Arg-Arg-Ile-OH

Mol. Formula : $C_{37}H_{63}N_{13}O_8$ **FW :** 818.2

Note : *Truncated analog of dynorphin A which does not bind to opioid receptors*

Reference : Takemori, AE; Loh HH; Lee NM *J Pharmacol Exp Ther* **1993**, *266*, 121-4.
Meyer, ME *Pharmacol Biochem Behav* **1993**, *44*, 329-32.

Catalog number : PEPT-040

Name : Dynorphin A 1-8 *tris*(trifluoroacetate)

Sequence : H-Tyr-Gly-Gly-Phe-Leu-Arg-Arg-Ile-OH

Mol. Formula : $C_{52}H_{75}F_9N_{14}O_{16}$ **FW :** 1323.24

Note : *Endogenous peptide agonist for opioid receptors.*

Reference : Weber, E; *et al. Nature* **1982**, *299*, 77.
Corbett, A; *et al. Nature* **1982**, *299*, 79.
Bell, KM; Traynor, JR *Can J Physiol Pharmacol* **1998**, *76*, 325.

Catalog number : PEPT-041

Name : Dynorphin A 2-8 *tris*(trifluoroacetate)

Sequence : H-Gly-Gly-Phe-Leu-Arg-Arg-Ile-OH

Mol. Formula : $C_{43}H_{66}F_9N_{13}O_{14}$ **FW :** 1159.69

Note : *Des-Tyr1 analog of dynorphin A (1-8).*

Reference : Takemori, AE; Loh HH; Lee NM *J Pharmacol Exp Ther* **1993**, *266*, 121-4.
Meyer, ME *Pharmacol Biochem Behav* **1993**, *44*, 329-32.

Catalog number : MPSP-023

Name : Dynorphin B

Sequence : H-Tyr-Gly-Gly-Phe-Leu-Arg-Arg-Gln-Phe-Lys-Val-Val-Thr-OH

Mol. Formula : $C_{74}H_{115}N_{21}O_{17}$ **FW :** 1571.1

Note : *N-terminal part of leumorphin*

Reference : Kilpatrick, DL; *et al. Proc Natl Acad Sci USA* **1982**, *79*, 6480-83.
Seizinger, BR; *et al. J Neurochem* **1984**, *42*, 447-457.

Catalog number : MPSP-015

Name : Dynorphin(1-17)

Sequence : H-Tyr-Gly-Gly-Phe-Leu-Arg-Arg-Ile-Arg-Pro-Lys-Leu-Lys-Trp-Asp-Asn-Gln-OH

Mol. Formula : $C_{99}H_{155}N_{31}O_{23}$ **FW :** 2147.8

Note : *Considered the endogenous ligand for kappa receptors.*

Reference : Goldstein, A; *et al. Proc Natl Acad Sci USA* **1981**, *78*, 7219-23.
Cox, BM; *et al. Life Sci* **1975**, *16*, 1777-1782.
Goldstein, A; *et al. Proc Natl Acad Sci USA* **1979**, *78*, 6666-70.

Catalog number : MPSP-070

Name : Endomorphin-1

Sequence : H-Tyr-Pro-Trp-Phe-NH_2

Mol. Formula : $C_{34}H_{38}N_6O_5$ **FW :** 610.7

Note : *Endogenous tetrapeptide agonist selective for the μ receptor.*

Reference : Zadina, JE; *et al. Nature* **1997**, *386*, 499.
Goldberg, IE; *et al. JPharmacol Exp Ther* **1998**, *286*, 1007.
McConalogue, K; *et al. Neuroscience* **1999**, *90*, 1051.

Catalog number : PEPT-044

Name : Endomorphin-1 Trifluoroacetate/Acetate

Sequence : TFA/HOAc •Tyr-Pro-Trp-Phe-NH_2

Mol. Formula : $C_{36}H_{39\cdot15}F_{2\cdot85}N_6O_7$ **FW :** 722.04

Note : *Endogenous tetrapeptide agonist selective for the μ receptor.*

Reference : JEZadina *et al.* ., Nature, 386, 499 (1997)
IEGoldberg *et al.* ., JPharmacolExpTher., 286, 1007 (1998)
KMcConalogue *et al.* ., Neuroscience, 90, 1051 (1999)

Catalog number : MPSP-073

Name : Endomorphin-2

Sequence : H-Tyr-Pro-Phe-Phe-NH_2

Mol. Formula : $C_{32}H_{37}N_5O_5$ **FW :** 571.7

Note : *Endogenous tetrapeptide agonist selective for the μ receptor.*

Reference : Zadina, JE; *et al. Nature* **1997**, *386*, 499-502.
Goldberg, IE; *et al. J Pharmacol Exp Ther* **1998**, *286*, 1007-13.
McConalogue, K; *et al. Neuroscience* **1999**, *90*, 1051-9.

Catalog number : PEPT-045

Name : Endomorphin-2 Trifluoroacetate/Acetate

Sequence : TFA/HOAc •Tyr-Pro-Phe-Phe-NH_2

Mol. Formula : $C_{34}H_{38}{\cdot}_3F_2{\cdot}_7N_5O_7$ **FW :** 680.30

Note : *Endogenous tetrapeptide agonist selective for the μ receptor.*

Reference : Zadina, JE*; et al. Nature* **1997**, *386*, 499-502.
Goldberg, IE*; et al. J Pharmacol Exp Ther* **1998**, *286*, 1007-13.
McConalogue, K*; et al. Neuroscience* **1999**, *90*, 1051-9.

Catalog number : MPSP-074

Name : [$^3H_2$]Endomorphin-2

Sequence : H-Tyr[$^3H_2$]-Pro-Phe-Phe-NH_2

Mol. Formula : $C_{32}H_{35}N_5O_{53}H_2$ **FW :** 575.7

Note : *Radioactive ligand for MPSP-073*

Reference : Spetea, M*; et al. Biochem Biophys Res Commun* **1998**, *250*, 720-5.

Catalog number : MPSP-024

Name : β-Endorphin

Sequence : H-Tyr-Gly-Gly-Phe-Met-Thr-Ser-Glu-Lys-Ser-Gln-Thr-Pro-Leu-Val-Thr-Leu-Phe-Lys-Asn-Ala-Ile-Ile-Lys-Asn-Ala-Tyr-Lys-Lys-Gly-Glu-OH

Mol. Formula : $C_{158}H_{251}N_{39}O_{46}S$ **FW :** 3465.6

Note : *Endogenous opioid peptide. Contains enkephalin sequence.*

Reference : Li, CH; *et al. Biochem Biophys Res Commun* **1976**, *72*, 1542-1547.
Cox, BM; *et al. Proc Natl Acad Sci USA* **1976**, *73*, 1821-1823.
Bradbury, AF; *et al. Nature* **1976**, *260*, 165-166.

Catalog number : MPSP-026

Name : [^{125}I]β-Endorphin

Sequence : H-YGGFMTSEKSQTPLVTLFKNAIIKNAYKY[$^{125}I_2$]GE-OH

Mol. Formula : $C_{158}H_{249}N_{39}O_{46}S_{125}I_2$ **FW :** 3589.6

Note : *Radioactive ligand for MPSP-024*

Reference : *Deby-Dupont, G; et al. C R Seances Soc Biol Fil **1983**, 177, 259-68.*
*Schweigerer, L; et al. J Biol Chem **1983**, 258, 12287-92.*

Catalog number : MPSP-025

Name : [$^3H_2$]β-Endorphin

Sequence : H-Tyr-Gly-Gly-Phe-Met-Thr-Ser-Glu-Lys-Ser-Gln-Thr-Pro-Leu-Val-Thr-Leu-Phe-Lys-Asn-Ala-Ile-Ile-Lys-Asn-Ala-[$^3H_2$]Tyr-Lys-Lys-Gly-Glu-OH

Mol. Formula : $C_{158}H_{249}N_{39}O_{46}S_3H_2$ **FW :** 3469.6

Note : *Radioactive ligand for MPSP-024*

Reference : Li, CH; *et al. Proc Natl Acad Sci USA* **1980**, *77*, 2303-4.

Catalog number : MPSP-081

Name : [$^3H_2$]Leu-Enkephalin-acid

Sequence : H-[$^3H_2$]Tyr-Gly-Gly-Phe-Leu-OH

Mol. Formula : $C_{28}H_{37}N_5O_7$ **FW :** 559.3

Note : *Radioactive ligand for MPSP-080.*

Catalog number : PEPT-036

Name : FMRF amide *bis*(trifluoroacetate)

Sequence : H-Phe-Met-Arg-Phe-NH_2

Mol. Formula : $C_{33}H_{44}F_6N_8O_8S$ **FW :** 826.82

Note : *Mollusscan cardioexcitatory neuropeptide.*

Reference : Price, DA; Greenberg, MJ *Science* **1997**, *197*, 670.
Tang, J; *et al. Proc Natl Acad Sci USA* **1984**, *81*, 5002.

Catalog number : MPSP-008

Name : ICI 174,864

Sequence : N,N-Diallyl-Tyr-Aib-Aib-Phe-Leu-OH

Mol. Formula : $C_{38}H_{53}N_5O_7$ **FW :** 691.87

Note : *Synthetic enkephalin antagonist selective for the δ receptor.*

Reference : Cotton, R*; et al.* US Patent 4,474,767 (**1984**).
Cotton, R*; et al. Eur J Pharmacol* **1984**, *97*, 331-2.
Dray, A; Nunan L *Peptides* **1984**, *5*, 1015-6.
Smith, CB; Bennett-Kelly L; Woods JH *Neuropeptides* **1984**, *5*, 161-4.

Catalog number : PEPT-017

Name : ICI 174864 hydrochloride

Sequence : N,N-Diallyl-Tyr-Aib-Aib-Phe-Leu-OH

Mol. Formula : $C_{38}H_{54}ClN_5O_7$ **FW :** 728.34

Note : *Synthetic enkephalin antagonist selective for the δ receptor.*

Reference : Cotten, R; *et al.* US Patent 4,474,767 (**1984**).
Cotten, R; *et al. Eur J Pharmacol* **1984**, *97*, 331.
Dray, D; Nunan, L *Peptides* **1984**, *5*, 1015.

Catalog number : MPSP-078

Name : Kaffiralin-1

Sequence : H-D-Phe-D-Phe-D-Ile-D-Arg-NH_2

Mol. Formula : $C_{30}H_{44}N_8O_4$ **FW :** 580.7

Note : *Kappa-selective agonist identified from a combinatorial library*

Reference : Dooley, CT*; et al. J Biol Chem* **1998**, *273*, 18848-56.

Catalog number : MPSP-079

Name : [$^3H_2$]Kaffiralin-1

Sequence : H-[^{3}H]D-Phe-[^{3}H]D-Phe-D-Ile-D-Arg-NH_2

Mol. Formula : $C_{30}H_{42}N_8O_{43}H_2$ **FW :** 584.7

Note : *Radioactive ligand for MPSP-076*

Reference : Dooley, CT*; et al. J Biol Chem* **1998**, *273*, 18848-56.

Catalog number : MPSP-076

Name : Kaffiralin-2

Sequence : H-D-Phe-D-Phe-D-Nle-D-Arg-NH_2

Mol. Formula : $C_{30}H_{44}N_8O_4$ **FW :** 580.7

Note : *Kappa-selective agonist identified from a combinatorial library.*

Reference : Dooly, CT; *et al. J Bio Chem* **1998**, *273*, 18848-18856.

Catalog number : MPSP-077

Name : [$^3H_2$]Kaffiralin-2

Sequence : H-[^{3}H]D-Phe-[^{3}H]D-Phe-D-Nle-D-Arg-NH_2

Mol. Formula : $C_{30}H_{42}N_8O_{43}H_2$ **FW :** 584.7

Note : *Radioactive ligand for MPSP-076.*

Catalog number : PEPT-003

Name : [Leu^5]Enkephalin trifluoroacetate

Sequence : H-Tyr-Gly-Gly-Phe-Leu-OH

Mol. Formula : $C_{30}H_{38}F_3N_5O_9$ **FW :** 669.62

Note : *Endogenous enkephalin.*

Reference : Hughes, J; *et al. Nature* **1975**, *258*, 577.
Jones, D *Tetrahedron Lett* **1977**, 2853.
Vilkas, E; *et al. Int J Peptide Protein Res* **1980**, *15*, 29.

Catalog number : MPSP-080

Name : Leu-Enkephalin-acid

Sequence : H-Tyr-Gly-Gly-Phe-Leu-OH

Mol. Formula : $C_{28}H_{37}N_5O_7$ **FW :** 555.3

Note : *Endogenous enkephalin.*

Reference : Hughes, J; *et al. Nature* **1975**, *258*, 577.
Jones, D *Tetrahedron Lett* **1977**, 2853.
Vilkas, E; *et al. Int J Peptide Protein Res* **1980**, *15*, 29.

Catalog number : PEPT-007

Name : [Met^5]Enkephalinamide hydrochloride

Sequence : H-Tyr-Gly-Gly-Phe-Met-NH_2

Mol. Formula : $C_{27}H_{37}ClN_6O_6S$ **FW :** 609.14

Note : *Amide analog of [Met5]enkephalin.*

Reference : Puig, MM; *et al. Arch Int Pharmacol Ther* **1979**, *226*, 69.
Berger, E; *et al. Pharmazie* **1979**, *34*, 349.

Catalog number : MPSP-064

Name : Met-Enkephalin-acid

Sequence : H-Tyr-Gly-Gly-Phe-Met-OH

Mol. Formula : $C_{28}H_{37}N_5O_7$ **FW :** 573.7

Note : *Endogenous opioid peptide*

Catalog number : MPSP-029

Name : Met-Enkephalin-amide

Sequence : H-Tyr-Gly-Gly-Phe-Met-NH_2

Mol. Formula : $C_{27}H_{36}N_6O_6S$ **FW :** 572.8

Note : *Amide analog of [Met5]enkephalin, endogenous opioid peptide.*

Reference : Hughes, J*; et al. Nature* **1975**, *258*, 577-80.
Vavrek, RJ*; et al. Peptides* **1981**, *2*, 303-8.

Catalog number : PEPT-020

Name : Methyl N,N-Diallyl-O-tert-butyltyrosyl-α-aminoisobutyryl-α-aminoisobutyrate

Sequence : N,N-Dallyl-Tyr(Bu^t)-Aib-Aib-OMe

Mol. Formula : $C_{28}H_{43}N_3O_5$ **FW :** 501.67

Catalog number : MPSP-042

Name : Metkephamid

Sequence : H-Tyr-Ala-Gly-N$^\alpha$-Me-Phe-Met-NH_2

Mol. Formula : $C_{29}H_{40}N_6O_6S$ **FW :** 600.8

Note : *Stable, systemically active analog of [Met5]enkephalin.*

Reference : RCFredrickson, *et al.* ., Science, 211, 603-605(1981)

Catalog number : PEPT-009

Name : Metkephamide hydrochloride

Sequence : Tyr-D-Ala-Gly-N$^\alpha$-Me-Phe-Met-NH_2

Mol. Formula : $C_{29}H_{41}ClN_6O_6S$ **FW :** 637.19

Note : *Stable, systemically active analog of [Met^5]enkephalin.*

Reference : Frederickson, RCA; *et al. Science* **1981**, *211*, 603.

Catalog number : PEPT-004

Name : N-(*tert*-Butyloxycarbonyl)tyrosylglycylglycylphenylalanylleucine methyl ester

Sequence : Boc-Tyr-Gly-Gly-Phe-Leu-OMe

Mol. Formula : $C_{34}H_{47}N_5O_9$ **FW :** 669.77

Note : *[Leu^5]enkephalin synthetic precursor.*

Reference : Vilkas, E; *et al. Int J Peptide Protein Res* **1980**, *15*, 29.

Catalog number : PEPT-006

Name : N-(*tert*-Butyloxycarbonyl)tyrosylglycylglycylphenylalanylmethionine methyl ester

Sequence : Boc-Tyr-Gly-Gly-Phe-Met-OMe

Mol. Formula : $C_{33}H_{45}N_5O_9S$ **FW :** 687.81

Note : *[Met5]enkephalin synthetic precursor.*

Reference : Bhotre, BJ; *et al. J Indian Chem Soc* **1978**, *55*, 1128.

Catalog number : PEPT-018

Name : N,N-Diallyl-O-tert-butyltyrosyl-α-aminoisobutyryl-α-aminoisobutyrylphenylalanylleucine

Sequence : N,N-Diallyl-Tyr(Bu^t)-Aib-Aib-Phe-Leu-OH

Mol. Formula : $C_{42}H_{61}N_5O_7$ **FW :** 747.98

Reference : Cotton, R.; et al. Eur J Pharmacol **1984**, 97, 331-2.

Catalog number : PEPT-019

Name : N,N-Diallyl-O-tert-butyltyrosyl-α-aminoisobutyryl-α-aminoisobutyrylphenylalanylleucine methyl ester

Sequence : N,N-Diallyl-Tyr(Bu^t)-Aib-Aib-Phe-Leu-OMe

Mol. Formula : $C_{43}H_{63}N_5O_7$ **FW :** 762.01

Note : *ICI 174864 synthetic intermediate.*

Reference : Flippen-Anderson, JL; *et al. Lett Pept Sci* **1994**, *1*, 107.

Catalog number : MPSP-059

Name : [$^3H_2$]Orphanin FQ; [$^3H_2$]Nociceptin

Sequence : H-Phe[^{3}H]-Gly-Gly-Phe[^{3}H]-Thr-Gly-Ala-Arg-Lys-Ser-Ala-Arg-Lys-Leu-Ala-Asn-Gln-OH

Mol. Formula : $C_{79}H_{127}N_{27}O_{223}H_2$ **FW :** 1813.4

Note : *Radioactive ligand for MPSP-058*

Reference : Dooley, CT; Houghten RA *Life Sci* **1996**, *59*, PL23-9.

Catalog number : MPSP-082

Name : [$^{3}H_{4}$]Tyr^{14}Orphanin FQ

Sequence : H-Phe[^{3}H]-Gly-Gly-Phe[^{3}H]-Thr-Gly-Ala-Arg-Lys-Ser-Ala-Arg-Lys-Tyr[$^{3}H_{2}$]-Ala-Asn-Gln-OH

Mol. Formula : $C_{82}H_{123}N_{27}O_{233}H_{4}$ **FW :** 1867.1

Note : *Radioactive ligand for MPSP-058*

Reference : Dooley, CT; *et al. Life Science* **1996**, *59*, PL23-PL29.

Catalog number : MPSP-095

Name : [$^{3}H_{4}$]Orphanin FQ

Sequence : H-[^{3}H]Phe-Gly-Gly-[^{3}H]Phe-Thr-Gly-Ala-Arg-Lys-Ser-Ala-Arg-Lys-[$^{3}H_{2}$]Leu-Ala-Asn-Gln-OH

Mol. Formula : $C_{79}H_{125}N_{27}O_{223}H_{4}$ **FW :** 1817.4

Note : *Radioactive ligand for MPSP-058.*

Catalog number : MPSP-083

Name : (Tyr^{14})Orphanin FQ analog

Sequence : H-Phe-Gly-Gly-Phe-Thr-Gly-Ala-Arg-Lys-Ser-Ala-Arg-Lys-Tyr-Ala-Asn-Gln-OH

Mol. Formula : $C_{82}H_{127}N_{27}O_{23}$ **FW :** 1859.1

Note : *Control ligand for MPSP-082.*

Catalog number : MPSP-058

Name : Orphanin FQ; Nociceptin

Sequence : H-Phe-Gly-Gly-Phe-Thr-Gly-Ala-Arg-Lys-Ser-Ala-Arg-Lys-Leu-Ala-Asn-Gln-OH

Mol. Formula : $C_{79}H_{129}N_{27}O_{22}$ **FW :** 1809.4

Note : *Endogenous ligand for orphan opioid like receptor (ORL)*

Reference : Reinscheid, RK*; et al. Science* **1995**, *270*, 792-4.
Meunier, JC*; et al. Nature* **1995**, *377*, 532-5.

Catalog number : PEPT-023

Name : PL017 trifluoroacetate

Sequence : Tyr-Pro-N$^{\alpha}$-Me-Phe-D-Pro-NH_2

Mol. Formula : $C_{31}H_{38}F_{3}N_{5}O_{7}$ **FW :** 649.67

Note : *Synthetic morphiceptin agonist selective for the μ receptor.*

Reference : Chang, KJ; *et al. Science* **1981**, *212*, 75.

Catalog number : MPSP-009

Name : PLO17

Sequence : H-Tyr-Pro-N^{α}-Me-Phe-D-Pro-NH_2

Mol. Formula : $C_{29}H_{37}N_5O_5$ **FW :** 535.65

Note : *Synthetic morphiceptin agonist selective for the μ receptor. Casomorphin analog.*

Reference : Chang, KJ*; et al. J Pharmacol Exp Ther* **1983**, *227*, 403-8.

Catalog number : MPSP-010

Name : [$^3H_2$]PLO17

Sequence : H-Tyr[$^3H_2$]-Pro-N^{α}-Me-Phe-D-Pro-NH_2

Mol. Formula : $C_{29}H_{35}N_5O_{53}H_2$ **FW :** 539.6

Note : *Radioactive ligand for MPSP-009.*

Reference : Hawkins, KN*; et al. Eur J Pharmacol* **1987**, *133*, 351-2.

Catalog number : MPSP-060

Name : Dansyl-PQR-amide

Sequence : Dansyl-Pro-Gln-Arg-NH_2

Mol. Formula : $C_{28}H_{41}N_9O_6S$ **FW :** 631.5

Note : *Fluorescent truncation analog of neuropeptide FF(NPFF) an anti-opiate peptide*

Reference : Malin, DH*; et al. Life Sci* **1993**, *53*, PL261-6.

Catalog number : MPSP-062

Name : Benzyl-PQR-amide

Sequence : Benzyl-Pro-Gln-Arg-NH_2

Mol. Formula : $C_{23}H_{36}N_8O_4$ **FW :** 488.6

Note : *Truncation analog of neuropeptide FF(NPFF) an anti-opiate peptide*

Catalog number : PEPT-051

Name : SS-20; Phenylalanyl-D-arginylphenylalanyllysinamide *tris*(trifluoroacetate)

Sequence : Phe-D-Arg-Phe-Lys-NH_2

Mol. Formula : $C_{36}H_{48}F_9N_8O_9$ **FW :** 938.9

Reference : Zhao, K*; et al. J Biol Chem* **2004**, *279*, 34682-90.

Catalog number : PEPT-050

Name : SS-31; D-Arginyl-(2',6'-dimethyl)tyrosyllysylphenylalaninamide *tris*(Trifluoroacetate)

Sequence : D-Arg-Dmt-Lys-Phe-NH_2

Mol. Formula : $C_{38}H_{52}F_9N_9O_{11}$ **FW :** 981.354

Reference : Zhao, K*; et al. J Biol Chem* **2004**, *279*, 34682-90.

Catalog number : MPSP-068

Name : TICP[Ψ]

Sequence : H-Tyr-TicΨ[CH_2-NH]Cha-Phe-OH

Mol. Formula : $C_{34}H_{38}N_6O_5$ **FW :** 610.7

Note : *Very stable potent δ antagonist*

Reference : Schiller, PW; *et al. J Signal Transduction Research* **1999**, *19*, 573-88.
Szatmari, I; *et al. Peptides* **1999**, *20*, 1079-83.

Catalog number : MPSP-056

Name : TIPP[Ψ]

Sequence : H-Tyr-TicΨ[CH_2-NH]Phe-Phe-OH

Mol. Formula : $C_{37}H_{40}N_4O_5$ **FW :** 620.8

Note : *Highly potent and stable δ receptor antagonist with extraordinary δ selectivity.*

Reference : Schiller, PW*; et al. J Med Chem* **1993**, *36*, 3182-7.
Visconti, LM*; et al. Neurosci Lett* **1994**, *181*, 47-9.

Catalog number : PEPT-030

Name : TIPP trifluoroacetate

Sequence : H-Tyr-Tic-Phe-Phe-OH

Mol. Formula : $C_{39}H_{39}F_3N_4O_8$ **FW :** 748.76

Note : *Highly potent and selective δ receptor antagonist.*

Reference : Schiller, PW; *et al. Proc Natl Acad Sci USA* **1992**, *89*, 11871.

Catalog number : PEPT-032

Name : TIPP[Ψ] acetate/trifluoroacetate

Sequence : H-Tyr-TicΨ[CH_2NH]Phe-Phe-OH

Mol. Formula : $C_{41}H_{45}F_3N_4O_9$ **FW :** 794.82

Note : *Highly potent and stable δ receptor antagonist with extraordinary δ selectivity.*

Reference : Schiller, PW; *et al. J Med Chem* **1993**, *36*, 3182.
Visconti, LM; *et al. Neurosci Lett* 1994, *181*, 47.

Catalog number : PEPT-052

Name : TIPP[Ψ] *bis*(trifluoroacetate)

Sequence : Tyr-Tic-Ψ[CH2NH]Phe-Phe-OH)

Mol. Formula : $C_{41}H_{42}F_6N_4O_9$ **FW :** 848.80

Note : *Selective delta opioid receptor antagonist.*

Reference : Schiller, PW*; et al. J Med Chem* **1993**, *36*, 3182-7.

Catalog number : MPSP-038

Name : TIPP-Enkephalin (TIPP)

Sequence : H-Tyr-Tic-Phe-Phe-OH

Mol. Formula : $C_{37}H_{38}N_4O_6$ **FW :** 634.8

Note : *Highly potentand selective δ-opioid receptor antagonist*

Reference : Schiller, PW; *et al. ., Proc Natl Acad Sci USA* **1992**, *89*, 11871-11875.
Flippen-Anderson, JL; *et al. Lett Pept Sci* **1994**, *1*, 107.

Catalog number : MPSP-039

Name : [$^3H_2$]Tipp-Enkephalin

Sequence : H-Tyr[$^3H_2$]-Tic-Phe-Phe-OH

Mol. Formula : $C_{37}H_{36}N_4O_{63}H_2$ **FW :** 638.8

Note : *Radioactive ligand for MPSP-038*

Reference : Nevin, ST*; et al. Life Sci* **1993**, *53*, PL57-62.

Catalog number : PEPT-031

Name : D-TIPP-NH_2 trifluoroacetate/acetate

Sequence : Tyr-D-Tic-Phe-Phe-NH_2

Mol. Formula : $C_{39}H_{40\cdot9}F_{2\cdot1}N_5O_7$ **FW :** 731.58

Note : *Potent and highly selective μ receptor agonist.*

Reference : Schiller, PW; *et al. Proc Natl Acad Sci USA* **1992**, *89*, 11871.
Flippen-Anderson, JL; *et al. J Peptide Res* **1997**, *49*, 384.

Catalog number : MPSP-115

Name : Orexin A (human, bovine, rat, mouse), Hypocretin-1

Sequence : pGlu-Pro-Leu-Pro-Asp-Cys-Cys-Arg-Gln-Lys-Thr-Cys-Ser-Cys-Arg-Leu-Tyr-Glu-Leu-Leu-His-Gly-Ala-Gly-Asn-His-Ala-Ala-Gly-Ile-Leu-Thr-Leu-NH_2 (Disulfide bridges Cys6-Cys12 and Cys7-Cys14)

Mol. Formula : $C_{152}H_{243}N_{47}O_{44}S_4$ **FW :** 3561.2

Note : *Hypothalamic neuropeptide that regulates feeding behavior.*

Reference : M.W. Schwartz, Nat. Med. 4, 385 (1998); T. Sakurai et al., Cell 92, 573 (1998); M.R. Jain et al., Regul. Peptides 87, 19 (2000); E. Goncz et al., Endocrinology 149, 1618 (2008)

Catalog number :	MPSP-116
Name :	Orexin B (human), Hypocretin-2
Sequence :	H-Arg-Ser-Gly-Pro-Pro-Gly-Leu-Gln-Gly-Arg-Leu-Gln-Arg-Leu-Leu-Gln-Ala-Ser-Gly-Asn-His-Ala-Ala-Gly-Ile-Leu-Thr-Met-NH_2
Mol. Formula :	$C_{123}H_{212}N_{44}O_{35}S$ **FW :** 2899.4
Note :	*Hypothalamic neuropeptide that regulates feeding behavior.*
Reference :	M.W. Schwartz, Nat. Med. 4, 385 (1998); T. Sakurai et al., Cell 92, 573 (1998); M.R. Jain et al., Regul. Peptides 87, 19 (2000)

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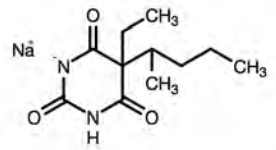
Sedatives: Barbiturate Class

Catalog number : 2270-012 new **CASRN :** 57-33-0

Name : Sodium pentobarbital

Mol. formula : $C_{11}H_{17}N_2NaO_3$ **FW :** 249.26 **DEA schedule :** 2

References : ChemSpider ID 5762.



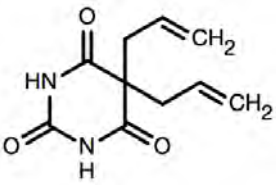
Catalog number : 2100-001 **CASRN :** 52-43-7

Name : 5,5-Diallylbarbituric acid; Allobarbital

Mol. formula : $C_{10}H_{12}N_2O_3$ **FW :** 208.21 **DEA schedule :** 2

Notes : *Anti-convulsant*

References : *Merck Index*, 14th ed., Monograph 263.



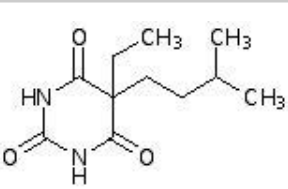
Catalog number : 2125-001 **CASRN :** 57-43-2

Name : (±)-Amobarbital

Mol. formula : $C_{11}H_{18}N_2O_3$ **FW :** 226.27 **DEA schedule :** 2

Notes : *Hypnotic; sedative (but not anti-anxiety)*

References : *Merck Index*, 14th ed., Monograph 570.

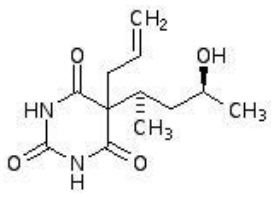


Catalog number : 2315-010

Name : (1'*RS*,3'*SR*)-5-Allyl-5-(3'-hydroxy-1'-methylbutyl)barbituric acid

Mol. formula : $C_{12}H_{18}N_2O_4$ **FW :** 254.28 **DEA schedule :** 2

Notes : *Secobarbital metabolite*



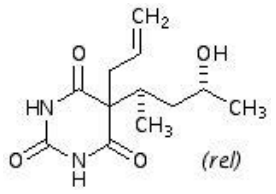
Catalog number : 2315-011

Name : (1'*RS*,3'*RS*)-5-Allyl-5-(3'-hydroxy-1'-methylbutyl)barbituric acid

Mol. formula : $C_{12}H_{18}N_2O_4$ **FW :** 254.28 **DEA schedule :** 2

Notes : *Secobarbital metabolite*

References : Carroll, FI; Mitchell, GN *J Med Chem* **1975**, *18*, 37-41.



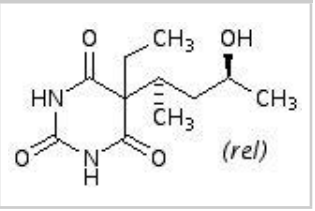
Catalog number : 2270-010

Name : (1'*RS*,3'*SR*)-5-Ethyl-5-(3'-hydroxy-1'-methylbutyl)barbituric acid

Mol. formula : $C_{11}H_{18}N_2O_4$ **FW :** 242.27 **DEA schedule :** 2

Notes : *Pentobarbital metabolite*

References : Carroll, FI; Mitchell, GN *J Med Chem* **1975**, *18*, 37-41.



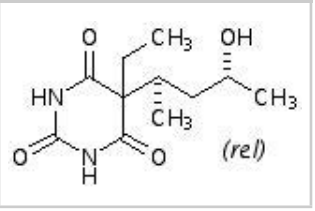
Catalog number : 2270-011

Name : (1'*RS*,3'*RS*)-5-Ethyl-5-(3'-hydroxy-1'-methylbutyl)barbituric acid

Mol. formula : $C_{11}H_{18}N_2O_4$ **FW :** 242.27 **DEA schedule :** 2

Notes : *Pentobarbital metabolite*

References : Carroll, FI; Mitchell, GN *J Med Chem* **1975**, *18*, 37-41.

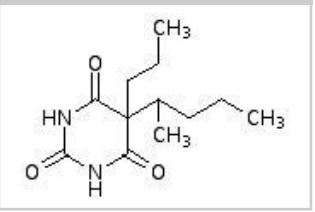


Catalog number : 2100-010

Name : (±)-5-Propyl-5-(1'-methylbutyl)barbituric acid

Mol. formula : $C_{12}H_{20}N_2O_3$ **FW :** 240.30 **DEA schedule :** 2

Notes : *Sedative*



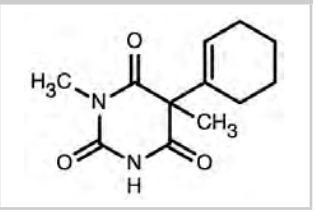
Catalog number : 2100-006 **CASRN :** 56-29-1

Name : (±)-Hexobarbital

Mol. formula : $C_{12}H_{16}N_2O_3$ **FW :** 236.26 **DEA schedule :** 2

Notes : *Hypnotic; sedative; GABA moderator*

References : *Merck Index*, 14th ed., Monograph 4704.

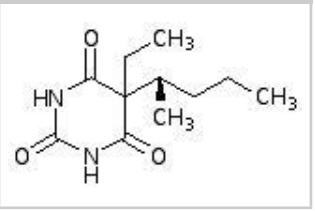


Catalog number : 2270-002 **CASRN :** 21642-82-0

Name : (-)-(*S*)-Pentobarbital

Mol. formula : $C_{11}H_{18}N_2O_3$ **FW :** 226.27 **DEA schedule :** 2

Notes : *Hypnotic; sedative (but not anti-anxiety)*



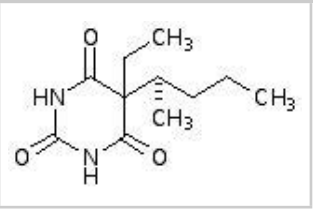
Catalog number : 2270-003 **CASRN :** 21642-83-1

Name : (+)-(*R*)-Pentobarbital

Mol. formula : $C_{11}H_{18}N_2O_3$ **FW :** 226.27 **DEA schedule :** 2

Notes : *Hypnotic; sedative (but not anti-anxiety)*

References : *Merck Index*, 14th ed., Monograph 7130.

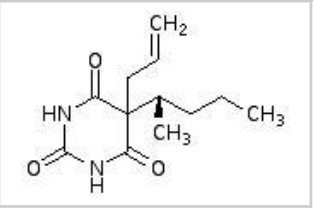


Catalog number : 2315-001 **CASRN :** 20224-45-7

Name : (-)-(*S*)-Secobarbital

Mol. formula : $C_{12}H_{18}N_2O_3$ **FW :** 238.27 **DEA schedule :** 2

Notes : *Sedative (but not anti-anxiety)*



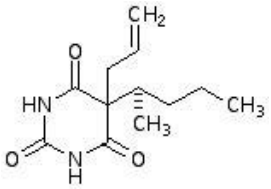
Catalog number : 2315-002 **CASRN :** 22328-94-5

Name : (+)-(*R*)-Secobarbital

Mol. formula : $C_{12}H_{18}N_2O_3$ **FW :** 238.27 **DEA schedule :** 2

Notes : *Hypnotic; sedative (but not anti-anxiety)*

References : *Merck Index*, 14th ed., Monograph 8420.
Carroll, FI; Mitchell, GN *J Med Chem* **1975**, *18*, 37-41.



Sedatives: Benzodiazepine Class

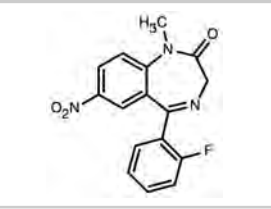
Catalog number : 2763-001 **CASRN :** 1622-62-4

Name : Flunitrazepam; Rohypnol

Mol. formula : $C_{16}H_{12}FN_3O_3$ **FW :** 313.28 **DEA schedule :** 4

Notes : *Hypnotic.*

References : Mattila, MA; Larni, HM *Drugs* **1980**, *20*, 353-74.

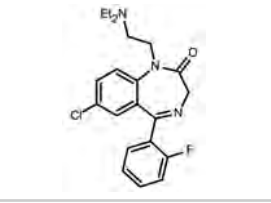


Catalog number : 2767-001 **CASRN :** 1172-18-5

Name : Flurazepam dihydrochloride

Mol. formula : $C_{21}H_{23}ClFN_3O$ **FW :** 460.80 **DEA schedule :** 4

References : *Merck Index*, 14th ed., Monograph 4198.



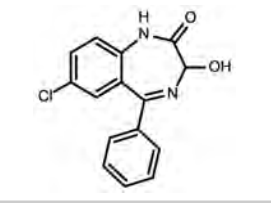
Catalog number : 2835-001 **CASRN :** 604-75-1

Name : (±)-Oxazepam

Mol. formula : $C_{15}H_{11}ClN_2O_2$ **FW :** 286.71 **DEA schedule :** 4

Notes : *Anti-anxiety, anti-insomnia*

References : *Merck Index*, 14th ed., Monograph 6926.



Sedatives: Butyrolactam Class

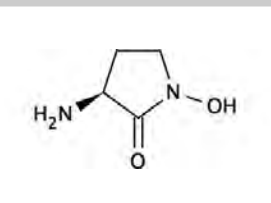
Catalog number : NOCD-071

Name : (-)-(*S*)-3-Amino-1-hydroxypyrrolidin-2-one; (-)-(*S*)-HA-966

Mol. formula : $C_4H_8N_2O_2$ **FW :** 116.12 **DEA schedule :** 0

Notes : *Potent γ-butyrolactone-like sedative*

References : Singh, L; *et al. Proc Natl Acad Sci USA* **1990**, *87*, 347-51.



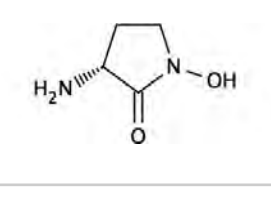
Catalog number : NOCD-072

Name : (+)-((*R*)-3-Amino-1-hydroxypyrrolidin-2-one; (+)-(*R*)-HA-966

Mol. formula : $C_4H_8N_2O_2$ **FW :** 116.12 **DEA schedule :** 0

Notes : *Glycine/NMDA receptor antagonist*

References : Singh, L; *et al. Proc Natl Acad Sci USA* **1990**, *87*, 347-51.



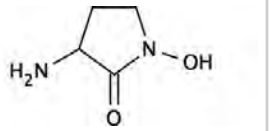
Catalog number : NOCD-070 **CASRN :** 1003-51-6

Name : (±)-3-Amino-1-hydroxypyrrolidin-2-one; (±)-HA-966

Mol. formula : $C_4H_8N_2O_2$ **FW :** 116.12 **DEA schedule :** 0

Notes : *Glycine/NMDA receptor antagonist*

References : Leeson, PD; Iversen, LL *J Med Chem* **1994**, *37*, 4053-4067.



Sedatives: Methaqualone Class

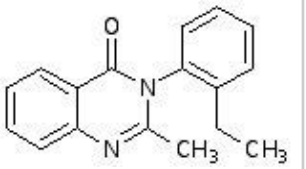
Catalog number : 2565-021 **CASRN :** 7432-25-9

Name : Etaqualone hydrochloride

Mol. formula : $C_{17}H_{17}ClN_2O$ **FW :** 300.79 **DEA schedule :** 0

Notes : *CNS depressant; sedative; hypnotic*

References : *Merck Index*, 14th ed., Monograph 3714.



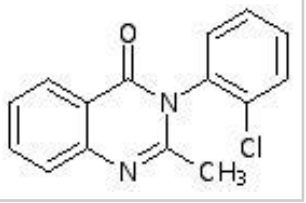
Catalog number : 2572-001 **CASRN :** 340-57-8

Name : Mecloqualone

Mol. formula : $C_{15}H_{11}ClN_2O$ **FW :** 270.74 **DEA schedule :** 1

Notes : *CNS depressant; sedative; hypnotic*

References : *Merck Index*, 14th ed., Monograph 5781.



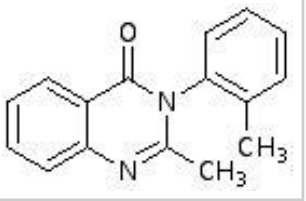
Catalog number : 2565-003 **CASRN :** 72-44-6

Name : Methaqualone

Mol. formula : $C_{16}H_{14}N_2O$ **FW :** 250.30 **DEA schedule :** 1

Notes : *CNS depressant; sedative; hypnotic*

References : *Merck Index*, 14th ed., Monograph 5960.

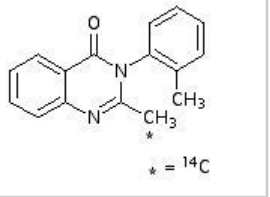


Catalog number : 2565-002 **CASRN :** 72-44-6

Name : [2-^{14}C]Methaqualone

Mol. formula : $C_{16}H_{14}N_2O$ **FW :** 251.30 **DEA schedule :** 1

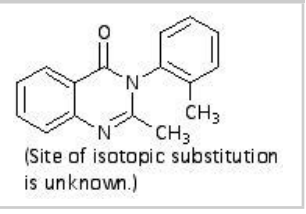
Notes : *Sedative; hypnotic (carbon-labeled).*



Catalog number : 2565-001 **CASRN :** 72-44-6

Name : [$^2H_4$]Methaqualone

Mol. formula : $C_{16}H_{14}N_2O$ **FW :** 254.32 **DEA schedule :** 1



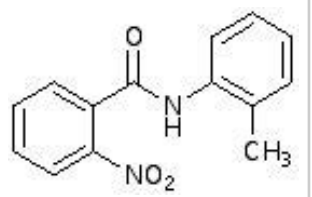
Catalog number : 2565-012 **CASRN :** 2385-25-3

Name : 2-Nitro-*o*-benzotoluidide

Mol. formula : $C_{14}H_{12}N_2O_3$ **FW :** 256.26 **DEA schedule :** 0

Notes : *Methaqualone urinary metabolite*

References : Murata, T; Yamamoto, I *Chem Pharm Bull* (Tokyo) **1970**, *18*, 133-7.

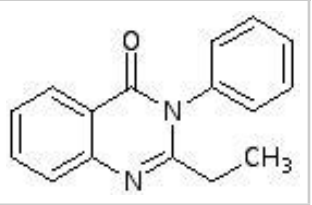


Catalog number : 2565-020 **CASRN :** 5260-41-3

Name : 2-Ethyl-3-phenyl-4(3H)-quinazolinone

Mol. formula : $C_{16}H_{14}N_2O$ **FW :** 250.30 **DEA schedule :** 0

References : Brine, GA; Coleman, ML; Carroll, FI *J Heterocyclic Chem* **1979**, *16*, 25.

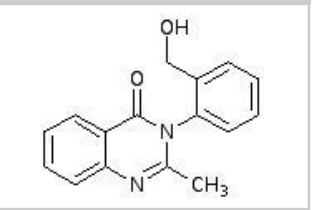


Catalog number : 2565-015 **CASRN :** 5060-50-4

Name : 2'-Hydroxymethaqualone

Mol. formula : $C_{16}H_{14}N_2O_2$ **FW :** 266.30 **DEA schedule :** 0

References : Brine, GA; Coleman, ML; Carroll, FI *J Heterocyclic Chem* **1979**, *16*, 25.

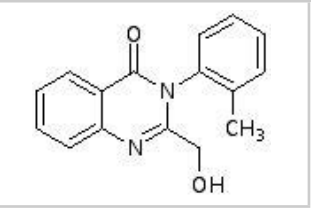


Catalog number : 2565-019 **CASRN :** 5060-49-1

Name : 2-Hydroxymethaqualone

Mol. formula : $C_{16}H_{14}N_2O_2$ **FW :** 266.30 **DEA schedule :** 0

References : Brine, GA; Coleman, ML; Carroll, FI *J Heterocyclic Chem* **1979**, *16*, 25.

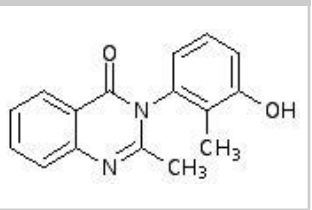


Catalog number : 2565-014 **CASRN :** 5060-63-9

Name : 3'-Hydroxymethaqualone

Mol. formula : $C_{16}H_{14}N_2O_2$ **FW :** 266.30 **DEA schedule :** 0

References : Brine, GA; Coleman, ML; Carroll, FI *J Heterocyclic Chem* **1979**, *16*, 25.

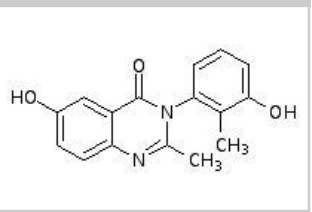


Catalog number : 2565-017 **CASRN :** 29541-82-0

Name : 6, 3'-Dihydroxymethaqualone

Mol. formula : $C_{10}H_{14}N_2O_3$ **FW :** 282.29 **DEA schedule :** 0

References : Brine, GA; Coleman, ML; Carroll, FI *J Heterocyclic Chem* **1979**, *16*, 25.

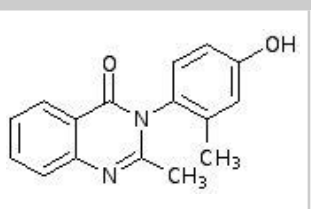


Catalog number : 2565-013 **CASRN :** 5060-52-6

Name : 4'-Hydroxymethaqualone

Mol. formula : $C_{16}H_{14}N_2O_2$ **FW :** 266.30 **DEA schedule :** 0

References : Brine, GA; Coleman, ML; Carroll, FI *J Heterocyclic Chem* **1979**, *16*, 25.

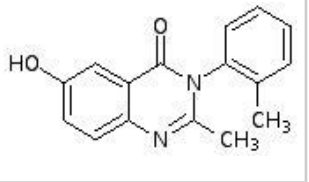


Catalog number : 2565-016 **CASRN :** 5060-51-5

Name : 6-Hydroxymethaqualone

Mol. formula : $C_{16}H_{14}N_2O_2$ **FW :** 266.30 **DEA schedule :** 0

References : Brine, GA; Coleman, ML; Carroll, FI *J Heterocyclic Chem* **1979**, *16*, 25.

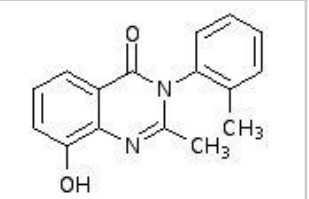


Catalog number : 2565-018 **CASRN :** 5060-53-7

Name : 8-Hydroxymethaqualone

Mol. formula : $C_{16}H_{14}N_2O_2$ **FW :** 266.30 **DEA schedule :** 0

References : Brine, GA; Coleman, ML; Carroll, FI *J Heterocyclic Chem* **1979**, *16*, 25.



Sedatives: Miscellaneous

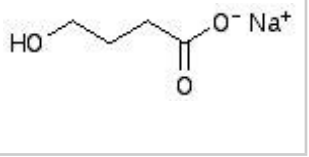
Catalog number : 2010-001 **CASRN :** 502-85-2

Name : γ-Hydroxybutyric acid, sodium salt; GHB

Mol. formula : $C_4H_7O_3Na$ **FW :** 126.09 **DEA schedule :** 1

Notes : *CNS depressant; analgesic*

References : *Merck Index*, 14th ed., Monograph 4815.



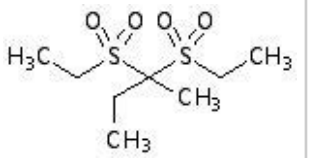
Catalog number : 2605-001 **CASRN :** 76-20-0

Name : Sulfonethylmethane; Ethylsulfonal

Mol. formula : $C_8H_{18}O_4S_4$ **FW :** 242.36 **DEA schedule :** 3

Notes : *Hypnotic*

References : *Merck Index*, 14th ed., Monograph 8958.



Stimulants: Aminorex Class

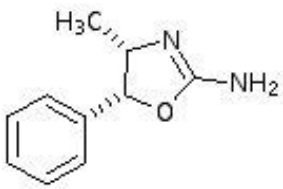
Catalog number : 1590-005 **CASRN :** 133633-24-6

Name : (–)-*cis*-(4*S*,5*R*)-2-Amino-4-methyl-5-phenyl-2-oxazoline hydrochloride; (–)-*cis*-4-Methylaminorex HCl

Mol. formula : $C_{10}H_{13}ClN_2O$ **FW :** 212.68 **DEA schedule :** 1

Notes : *CNS stimuant*

References : *Merck Index*, 14th ed., Monograph 6018.



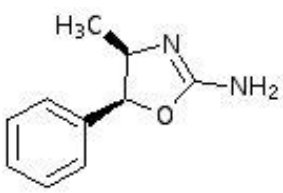
Catalog number : 1590-006 **CASRN :** 933777-34-5

Name : (+)-*cis*-(4*R*,5*S*)-2-Amino-4-methyl-5-phenyl-2-oxazoline hydrochloride; (+)-*cis*-4-Methylaminorex HCl

Mol. formula : $C_{10}H_{13}ClN_2O$ **FW :** 212.68 **DEA schedule :** 1

Notes : *CNS stimuant*

References : *Merck Index*, 14th ed., Monograph 6018.



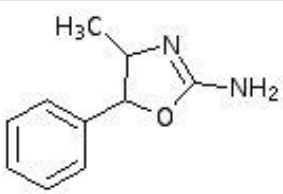
Catalog number : 1590-001 **CASRN :** 3568-94-3

Name : (±)-*cis*-(4*RS*,5*SR*)-2-Amino-4-methyl-5-phenyl-2-oxazoline; (±)-*cis*-4-Methylaminorex

Mol. formula : $C_{10}H_{12}N_2O$ **FW :** 176.22 **DEA schedule :** 1

Notes : *CNS stimuant*

References : *Merck Index*, 14th ed., Monograph 6018.



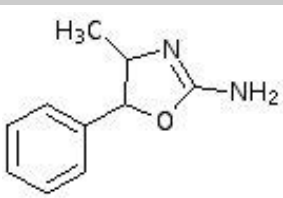
Catalog number : 1590-002 **CASRN :** 3568-94-3

Name : (±)-*cis*-(4*RS*,5*SR*)-2-Amino-4-methyl-5-phenyl-2-oxazoline hydrochloride; (±)-*cis*-4-Methylaminorex HCl

Mol. formula : $C_{10}H_{13}ClN_2O$ **FW :** 212.68 **DEA schedule :** 1

Notes : *CNS stimuant*

References : *Merck Index*, 14th ed., Monograph 6018.



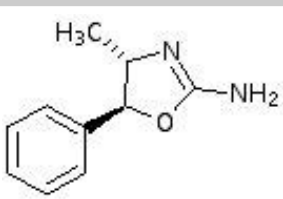
Catalog number : 1590-003 **CASRN :** 933777-34-5

Name : (–)-*trans*-(4*S*,5*S*)-2-Amino-4-methyl-5-phenyl-2-oxazoline hydrochloride; (–)-*trans*-4-Methylaminorex HCl

Mol. formula : $C_{10}H_{13}ClN_2O$ **FW :** 212.68 **DEA schedule :** 1

Notes : *CNS stimuant*

References : *Merck Index*, 14th ed., Monograph 6018.



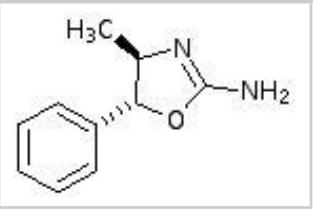
Catalog number : 1590-004 **CASRN :** 933777-37-8

Name : (+)-*trans*-(4*R*,5*R*)-2-Amino-4-methyl-5-phenyl-2-oxazoline hydrochloride; (+)-*trans*-4-Methylaminorex HCl

Mol. formula : $C_{10}H_{13}ClN_2O$ **FW :** 212.68 **DEA schedule :** 1

Notes : *CNS stimuant*

References : *Merck Index*, 14th ed., Monograph 6018.



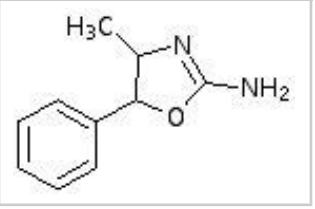
Catalog number : 1590-007 **CASRN :** 2077-59-0

Name : (±)-*trans*-(4*RS*,5*RS*)-2-Amino-4-methyl-5-phenyl-2-oxazoline hydrochloride; (±)-*trans*-4-Methylaminorex HCl

Mol. formula : $C_{10}H_{13}ClN_2O$ **FW :** 212.68 **DEA schedule :** 1

Notes : *CNS stimuant*

References : *Merck Index*, 14th ed., Monograph 6018.



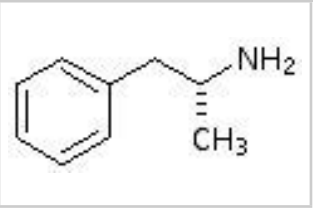
Stimulants: Amphetamine Class

Catalog number : 1100-003 **CASRN :** 51-62-7

Name : (-)-Amphetamine sulfate; Levamphetamine

Mol. formula : $C_{18}H_{28}N_2O_4S$ **FW :** 368.50 **DEA schedule :** 2

References : *Merck Index*, 14th ed., Monograph 582.



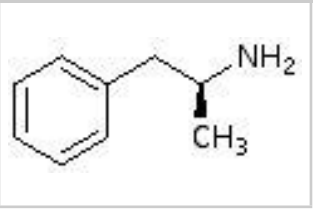
Catalog number : 1100-006 **CASRN :** 60-13-9

Name : (+)-Amphetamine sulfate; Dextroamphetamine sulfate

Mol. formula : $C_{18}H_{28}N_2O_4S$ **FW :** 368.50 **DEA schedule :** 2

Notes : *CNS stimulant; sympathomimetic; anorexic*

References : *Merck Index*, 14th ed., Monograph 2954.



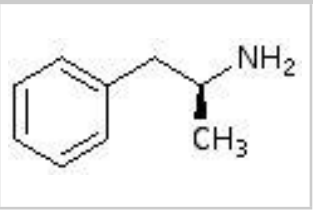
Catalog number : 1100-007 **CASRN :** 1462-73-3

Name : (+)-Amphetamine hydrochloride; Dextroamphetamine hydrochloride

Mol. formula : $C_9H_{14}ClN$ **FW :** 171.70 **DEA schedule :** 2

Notes : *CNS stimulant*

References : *Merck Index*, 14th ed., Monograph 2954.



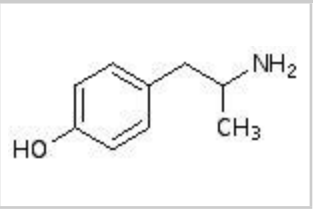
Catalog number : 1100-010 **CASRN :** 306-21-8

Name : (±)-4-Hydroxyamphetamine hydrobromide

Mol. formula : $C_9H_{14}BrNO$ **FW :** 232.12 **DEA schedule :** 2

Notes : *CNS stimulant; sympathomimetic; mydriatic*

References : *Merck Index*, 14th ed., Monograph 4810.



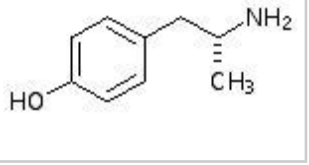
Catalog number : 1100-011 **CASRN :** 41509-97-1

Name : (-)-4-Hydroxyamphetamine hydrobromide

Mol. formula : $C_9H_{14}BrNO$ **FW :** 232.12 **DEA schedule :** 2

Notes : *CNS stimulant; sympathomimetic; mydriatic*

References : *Merck Index*, 14th ed., Monograph 4810.



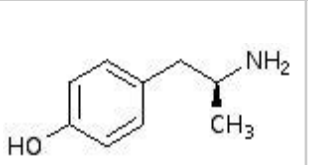
Catalog number : 1100-012 **CASRN :** 1693-66-9

Name : (+)-4-Hydroxyamphetamine hydrobromide

Mol. formula : $C_9H_{14}BrNO$ **FW :** 232.12 **DEA schedule :** 2

Notes : *CNS stimulant; sympathomimetic; mydriatic*

References : *Merck Index*, 14th ed., Monograph 4810.

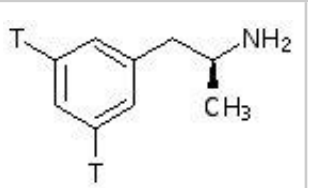


Catalog number : 1100-009

Name : (+)-(*S*)-[3,5-^{3}H(n)]Amphetamine

Mol. formula : $C_9H_{13}N$ **FW :** 139.22 **DEA schedule :** 2

Notes : *CNS stimulant (tritium-labeled).*

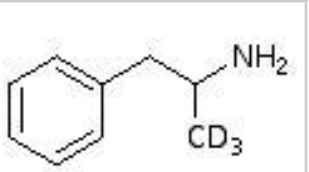


Catalog number : 1100-004 **CASRN :** 38875-35-3

Name : (±)-[1,1,1-^{2}H$_3$]Amphetamine sulfate

Mol. formula : $C_9H_{13}N$ **FW :** 374.53 **DEA schedule :** 2

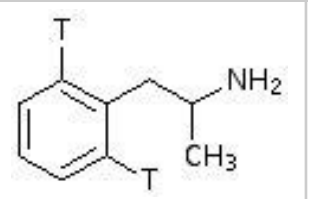
References : Cho, AK; *et al.* ., *Anal Chem* **1973**, *45*, 570-4.
Valtier, S; Cody, JT *J Anal Toxicol* **1995**, *19*, 375-80.



Catalog number : 1100-005

Name : (±)-[2',6'-^{3}H$_2$]Amphetamine; 2,6-Tritioamphetamine

Mol. formula : $C_9H_{13}N$ **FW :** 135.21 **DEA schedule :** 2



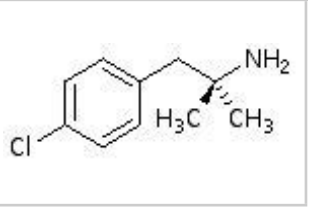
Catalog number : 1645-001 **CASRN :** 461-78-9

Name : Chlorphentermine; 4-Chloro-α,α-dimethyl-β-phenethylamine

Mol. formula : $C_{10}H_{14}ClN$ **FW :** 183.68 **DEA schedule :** 3

Notes : *Anorectic*

References : *Merck Index*, 14th ed., Monograph 2182.



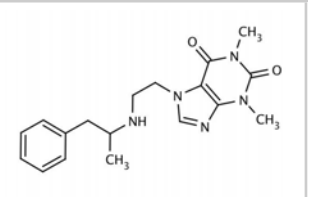
Catalog number : 1503-001 **CASRN :** 1892-80-4

Name : Fenethylline hydrochloride; Captagon HCl

Mol. formula : $C_{18}H_{24}N_5O_2Cl$ **FW :** 341419 **DEA schedule :** 2

Notes : *CNS stimulant*

References : *Merck Index*, 14th ed., Monograph 3972.



Stimulants: Benzhydrol Class

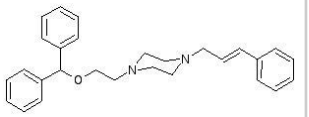
Catalog number : NOCD-040 **CASRN :** 67469-57-2

Name : GBR 12783

Mol. formula : $C_{28}H_{34}Cl_2N_2O$ **FW :** 485.48 **DEA schedule :** 0

Notes : *Dopamine uptake inhibitor.*

References : Bonnet, JJ; Costentin JEur J Pharmacol **1986**, *121*, 199-209.
Chagraoui, A; *et al. Neurosci Lett* **1987**, *78*, 175-9.

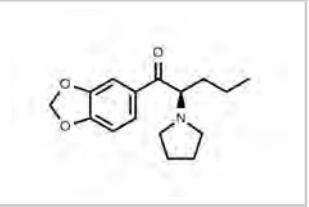


Stimulants: Cathinone Class

Catalog number : 7535-002 new **CASRN :** 1669434-93-8

Name : (*R*)-MDPV hydrochloride

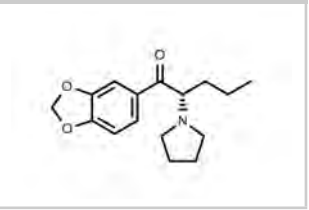
Mol. formula : $C_{16}H_{21}NO_3$ **FW :** 275.35 **DEA schedule :** 1



Catalog number : 7535-003 new **CASRN :** 1669434-94-9

Name : (*S*)-MDPV hydrochloride

Mol. formula : $C_{16}H_{21}NO_3$ **FW :** 275.35 **DEA schedule :** 1

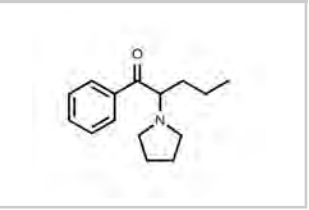


Catalog number : 7545-001 new **CASRN :** 5485-65-4

Name : α-PVP hydrochloride

Mol. formula : $C_{15}H_{21}NO$ **FW :** 231.34

References : Meltzer, PC*; et al.*, *J Med Chem* **2006**, *49*, 1420-32.

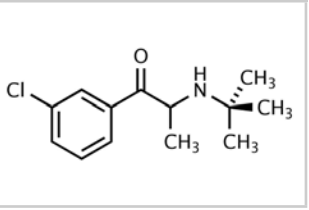


Catalog number : 1610-002 **CASRN :** 31677-93-7

Name : (±)-Bupropion hydrochloride

Mol. formula : $C_{13}H_{19}Cl_2NO$ **FW :** 276.21 **DEA schedule :** 0

References : Martin, P; Massol, J; Colin, JN; Lacomblez, L; Puech, AJ
Pharmacopsychiatry **1990**, *23*, 87-94.

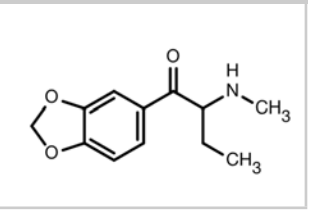


Catalog number : 7541-001 **CASRN :** 802575-11-7

Name : Butylone; bk-MBDB

Mol. formula : $C_{12}H_{15}NO_3$ **FW :** 221.26 **DEA schedule :** 1

References : Gatch, MB; Taylor CM; Forster MJ, *Behav Pharmacol* **2013**, *24*, 437-47.



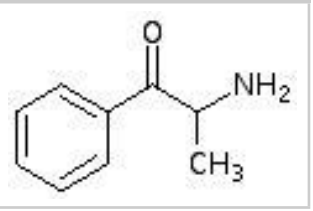
Catalog number : 1235-010 **CASRN :** 76333-53-4

Name : (±)-Cathinone hydrochloride

Mol. formula : $C_9H_{12}ClNO$ **FW :** 185.66 **DEA schedule :** 1

Notes : *CNS stimulant; psychotropic drug*

References : Kalix, P *Pharmacol Toxicol* **1992**, *70*, 77-86.
Merck Index, 14th ed., Monograph 1906.



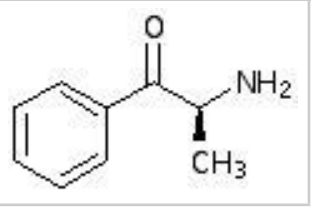
Catalog number : 1235-011 **CASRN :** 71031-15-7

Name : (-)-(*S*)-Cathinone hydrochloride

Mol. formula : $C_9H_{12}ClNO$ **FW :** 185.66 **DEA schedule :** 1

Notes : *CNS stimulant; psychotropic drug*

References : *Merck Index*, 14th ed., Monograph 1906.

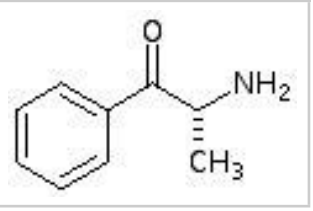


Catalog number : 1235-012 **CASRN :** 80096-54-4

Name : (+)-(*R*)-Cathinone hydrochloride

Mol. formula : $C_9H_{12}ClNO$ **FW :** 185.66 **DEA schedule :** 1

Notes : *CNS stimulant; psychotropic drug*

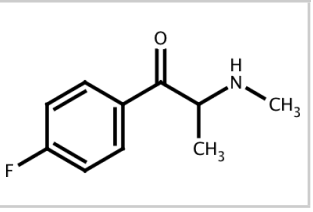


Catalog number : 1237-003 **CASRN :** 7589-35-7

Name : 4-Fluoromethcathinone; 4-FMC; Flephedrone

Mol. formula : $C_{10}H_{12}FNO$ **FW :** 181.21 **DEA schedule :** 1

References : Archer RP, *Forensic Sci Int*, **2009**, *185*(1-3), 10-20.



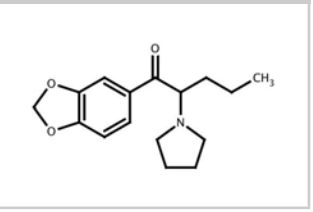
Catalog number : 7535-001 **CASRN :** 24622-62-6

Name : (±)-Methylenedioxypyrovalerone HCl; MDPV HCl

Mol. formula : $C_{16}H_{22}ClNO_3$ **FW :** 311.81 **DEA schedule :** 1

Notes : *Stimulant; norepinephrine/dopamine reuptake inhibitor.*

References : Coppola, M; Mondola R, *Toxicol Lett* **2012**, *208*, 12-5.

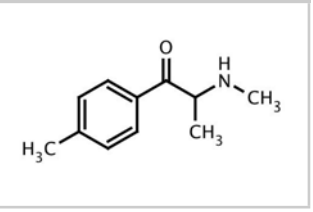


Catalog number : 1248-001 **CASRN :** 1189726-22-4

Name : (±)-Mephedrone hydrochloride

Mol. formula : $C_{11}H_{16}ClNO$ **FW :** 213.70 **DEA schedule :** 0

References : Wood, DM; *et al.* J Med Toxicol **2010**, 10.1007/s13181-010-0018-5.

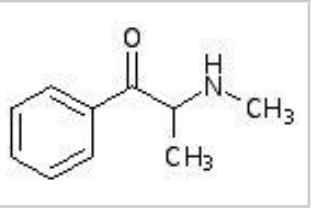


Catalog number : 1237-001 **CASRN :** 5650-44-2

Name : (±)-N-Methcathinone hydrochloride

Mol. formula : $C_{10}H_{14}ClNO$ **FW :** 199.67 **DEA schedule :** 1

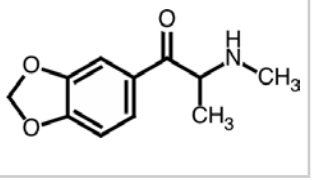
Notes : *CNS stimulant; psychotropic drug*



Catalog number : 7540-001 **CASRN :** 186028-79-5

Name : Methylone HCl

Mol. formula : $C_{11}H_{13}NO_3$ **FW :** 207.23 **DEA schedule :** 1

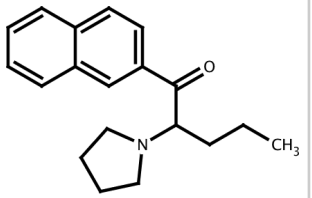


References : Cozzi NV. *Neuropsychopharmacology* , **2012**, *37*(5), 1192-1203. Niesink RJ. *Addict Biol,* **2005**, *10*(4), 321-323.

Catalog number : NOCD-126 **CASRN :** 850352-11-3

Name : Naphyrone; Naphthylpyrovalerone

Mol. formula : $C_{19}H_{23}NO$ **FW :** 281.39 **DEA schedule :** 1

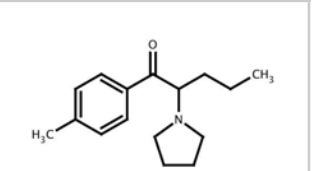


References : Meltzer PC, Butler D, Deschamps JR, Madras BK. *J Med Chem*, **2006**, *49*(4), 1420-1432.

Catalog number : 1485-001 **CASRN :** 1147-62-2

Name : (±)-Pyrovalerone HCl

Mol. formula : $C_{16}H_{24}ClNO$ **FW :** 281.82 **DEA schedule :** 5



References : Stille, G; *et al*., *Arzneimittelforschung* **1963**, *13*, 871-7. Michaelis, W; Russel JH; Schindler O, *J Med Chem* **1970**, *13*, 497-503.

Stimulants: Ephedrine Class

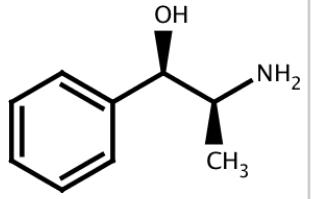
Catalog number : 1230-016 **CASRN :** 53643-20-2

Name : (-)-Norephedrine hydrochloride

Mol. formula : $C_9H_{14}ClNO$ **FW :** 187.68 **DEA schedule :** 4

Notes : *Nasal decongestant; appetite suppressent*

References : *Merck Index*, 14th ed., Monograph 7307.



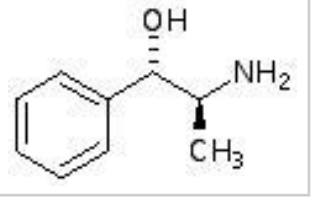
Catalog number : 1230-017 **CASRN :** 36393-56-3

Name : (+)-Norpseudoephedrine hydrochloride

Mol. formula : $C_9H_{14}ClNO$ **FW :** 187.68 **DEA schedule :** 4

Notes : *Nasal decongestant; appetite suppressent*

References : *Merck Index*, 14th ed., Monograph 6714.



Stimulants: Methamphetamine Class

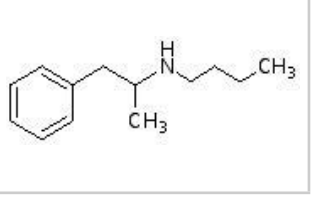
Catalog number : 1100-008 **CASRN :** 51799-33-8

Name : (±)-N-(*n*-Butyl)amphetamine hydrochloride

Mol. formula : $C_{13}H_{22}ClN$ **FW :** 227.78 **DEA schedule :** 2

Notes : *CNS stimulant*

References : Woolverton WL; Shybut, G; Johanson, CE *Pharmacol Biochem Behav* **1980**, *13*, 869-76.



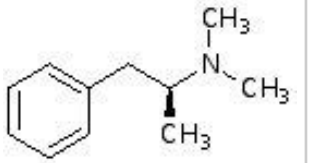
Catalog number : 1480-001 **CASRN :** 17279-39-9

Name : (+)-N,N-Dimethylamphetamine hydrochloride

Mol. formula : $C_{11}H_{18}ClN$ **FW :** 199.72 **DEA schedule :** 1

Notes : *CNS stimuant*

References : Ricaurte, GA; *et al. Brain Res* **1989**, *490*, 301-6.
Katz, JL; *et al. Psychopharmacology (Berl)* ***1992**, 107, 315-8.*



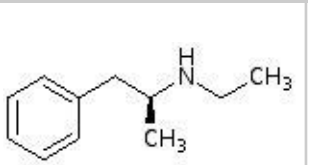
Catalog number : 1475-001 **CASRN :** 33817-11-7

Name : (+)-N-Ethylamphetamine hydrochloride

Mol. formula : $C_{11}H_{18}ClN$ **FW :** 199.71 **DEA schedule :** 1

Notes : *CNS stimulant*

References : *Merck Index*, 14th ed., Monograph 3763.

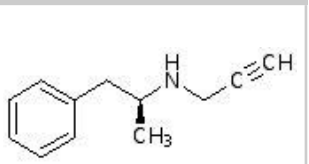


Catalog number : MEDD-007

Name : (-)-(*S*)-Desmethylselegiline hydrochloride

Mol. formula : $C_{12}H_{16}ClN$ **FW :** 209.72 **DEA schedule :** 0

References : Mytilineou C; Radcliffe PM; Olanow CW *J Neurochem* **1997**, *68*, 434-6.



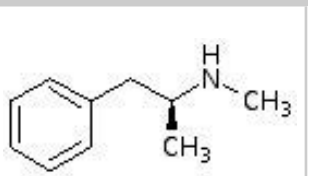
Catalog number : 1105-001 **CASRN :** 51-57-0

Name : (+)-(*S*)-Methamphetamine hydrochloride

Mol. formula : $C_{10}H_{16}ClN$ **FW :** 185.70 **DEA schedule :** 2

Notes : *CNS stimulant; sympathomimetic; anorexic*

References : *Merck Index*, 14th ed., Monograph 5948.



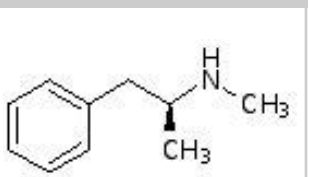
Catalog number : 1105-003 **CASRN :** 537-46-2

Name : (+)-Methamphetamine base

Mol. formula : $C_{10}H_{15}N$ **FW :** 149.24 **DEA schedule :** 2

Notes : *CNS stimulant*

References : *Merck Index*, 14th ed., Monograph 5948.



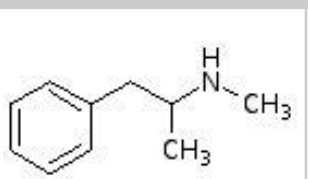
Catalog number : 1105-005 **CASRN :** 300-42-5

Name : (±)-Methamphetamine hydrochloride

Mol. formula : $C_{10}H_{16}ClN$ **FW :** 185.69 **DEA schedule :** 2

Notes : *CNS stimulant*

References : *Merck Index*, 14th ed., Monograph 5948.

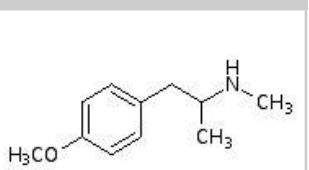


Catalog number : 1105-014 **CASRN :** 22331-70-0

Name : (±)-4-Methoxymethamphetamine hydrochloride; PMMA

Mol. formula : $C_{11}H_{18}ClNO$ **FW :** 215.75 **DEA schedule :** 0

References : Glennon, RA; Ismaiel, AE; Martin, B; Poff, D; Sutton, M *Pharmacol Biochem Behav* **1988**, *31*, 9-13.

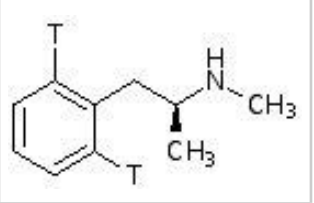


Catalog number : 1105-004

Name : (+)-[2',6'-^{3}H(n)Methamphetamine hydrochloride

Mol. formula : $C_{10}H_{16}ClN$ **FW :** 185.69 **DEA schedule :** 2

Notes : *CNS stimulant (tritium-labeled).*

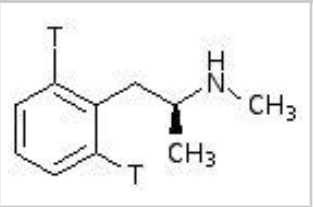


Catalog number : 1105-008

Name : (+)-[2,6-^{3}H(n)]Methamphetamine

Mol. formula : $C_{10}H_{15}N$ **FW :** 153.25 **DEA schedule :** 2

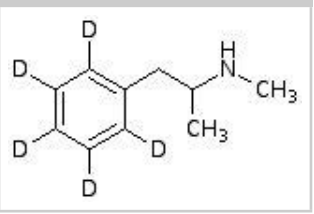
Notes : *CNS stimulant (tritium-labeled).*



Catalog number : 1105-002

Name : (±)-[2',3',4',5',6'-$^{2}H_5$]Methamphetamine hydrochloride

Mol. formula : $C_{10}H_{16}ClN$ **FW :** 190.72 **DEA schedule :** 2

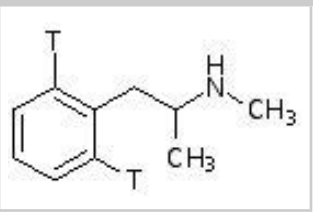


Catalog number : 1105-006

Name : (±)-[2',6'-^{3}H(n)]Methamphetamine hydrochloride

Mol. formula : $C_{10}H_{16}ClN$ **FW :** 189.71 **DEA schedule :** 2

Notes : *CNS stimulant (tritium-labeled).*

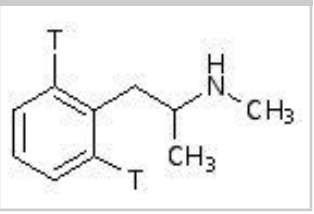


Catalog number : 1105-007

Name : (±)-[2,6-^{3}H(n)]Methamphetamine

Mol. formula : $C_{10}H_{15}N$ **FW :** 153.25 **DEA schedule :** 2

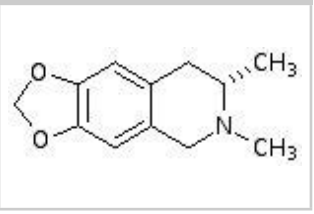
Notes : *CNS stimulant (tritium-labeled).*



Catalog number : NOCD-074

Name : (3*S*)-(+)-2,3-Dimethyl-6,7-methylenedioxytetrahydroisoquinoline hydrochloride

Mol. formula : $C_{12}H_{16}ClNO_2$ **FW :** 241.72 **DEA schedule :** 0



Stimulants: Methylphenidate Class

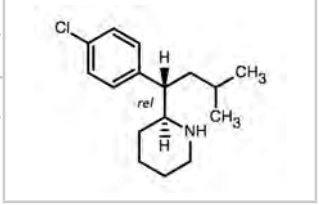
Catalog number : NOCD-140 **CASRN :** 928046-68-8

Name : (RR/SS)-2-[1-(4-Chlorophenyl)-3-methylbutyl]piperidine hydrochloride

Mol. formula : $C_{16}H_{24}ClN$ **FW :** 265.83 **DEA schedule :** 0

Notes : *Methylphenidate analog*

References : Froimowitz, M, et al., *J. Med. Chem.* **2007**, *50*, 219-232.



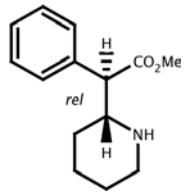
Catalog number : 1724-001 **CASRN :** 298-59-9

Name : (±)-*threo*-Methylphenidate hydrochloride; Ritalin

Mol. formula : $C_{14}H_{20}ClNO_2$ **FW :** 269.77 **DEA schedule :** 2

Notes : *Mild CNS stimulant*

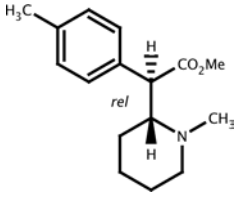
References : *Merck Index*, 14th ed., Monograph 6110.



Catalog number : MEDD-014 **CASRN :** 204981-87-3

Name : (±)-N-Methyl-*threo*-*p*-methylmethylphenidate hydrochloride

Mol. formula : $C_{16}H_{24}ClNO_2$ **FW :** 297.83 **DEA schedule :** 0



Stimulants: Miscellaneous

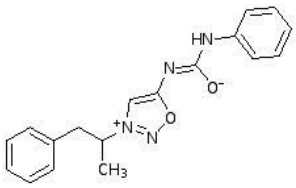
Catalog number : NOCD-076 **CASRN :** 34262-84-5

Name : Mesocarb; Sydnocarb

Mol. formula : $C_{18}H_{18}N_4O_2$ **FW :** 322.14 **DEA schedule :** 3

Notes : *Stimulant; dopamine reuptake inhibitor*

References : Bashkatova V; *et al. Ann N Y Acad Sci* **2002**, *965*, 180-92.

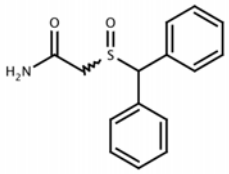


Catalog number : 1680-001 **CASRN :** 112111-43-0

Name : (±)-Modafinil

Mol. formula : $C_{15}H_{15}NO_2S$ **FW :** 273.35 **DEA schedule :** 4

References : Minzenberg, M; Carter, C *Neuropsychopharmacology* **2007**, *33*, 1477-1502.



Stimulants: Piperazine Class

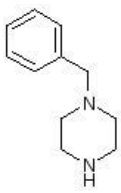
Catalog number : 7493-001 **CASRN :** 2759-28-6

Name : 1-Benzylpiperazine difumarate; BZP

Mol. formula : $C_{19}H_{24}N_2O_8$ **FW :** 408.41 **DEA schedule :** 1

Notes : *Psychomotor stimulant; serotonin (5-HT1) agonist.*

References : Lyon, RA; *et al. J Med Chem* **1986**, *29*, 630-4.
Staack, RF *Lancet* **2007**, *369*, 1411-3.
Lecompte, Y; Roussel O; Perrin M *Ann Pharm Fr* **2008**, *66*, 85-91.



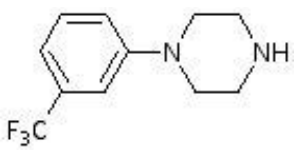
Catalog number : 7494-001 **CASRN :** 16015-69-3

Name : 1-(3-Trifluoromethylphenyl)piperazine hydrochloride; TFMPP

Mol. formula : $C_{11}H_{14}ClF_3N_2$ **FW :** 266.69 **DEA schedule :** 1

Notes : *Psychomotor stimulant; serotonin (5-HT1) agonist.*

References : Glennon, RA; McKenney JD; Young R *Life Sci* **1984**, *35*, 1475-80.
Lecompte, Y; Roussel O; Perrin M *Ann Pharm Fr* **2008**, *66*, 85-91.

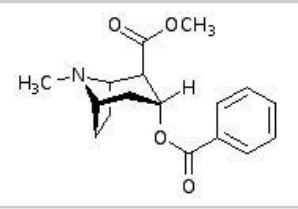


Stimulants: Tropane Class

Catalog number : 9041-010

Name : (±)-Allococaine

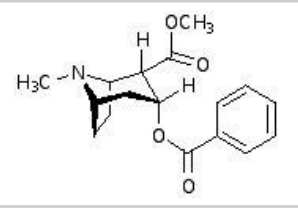
Mol. formula : $C_{17}H_{21}NO_4$ **FW :** 303.35 **DEA schedule :** 2



Catalog number : 9041-008 **CASRN :** 518-97-8

Name : (±)-Allopseudococaine hydrochloride

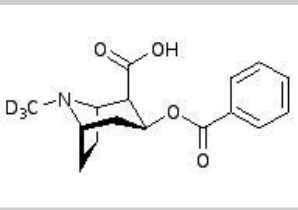
Mol. formula : $C_{17}H_{22}ClNO_4$ **FW :** 339.81 **DEA schedule :** 2



Catalog number : 9180-003

Name : (-)-[N-C^2H_3]Benzoylecgonine

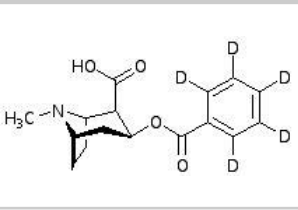
Mol. formula : $C_{16}H_{19}NO_4$ **FW :** 292.34 **DEA schedule :** 2



Catalog number : 9180-011

Name : (-)-[Phenyl-$^2H_5$]Benzoylecgonine

Mol. formula : $C_{16}H_{19}NO_4$ **FW :** 294.36 **DEA schedule :** 2



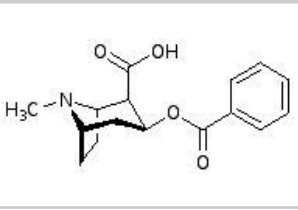
Catalog number : 9180-001 **CASRN :** 519-09-05

Name : (-)-Benzoylecgonine

Mol. formula : $C_{16}H_{19}NO_4$ **FW :** 289.34 **DEA schedule :** 2

Notes : *Major metabolite of cocaine.*

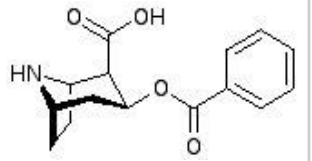
References : *Merck Index*, 14th ed., Monograph 1113.



Catalog number : 9180-004

Name : (-)-Benzoylnorecgonine hydrochloride

Mol. formula : $C_{15}H_{18}ClNO_4$ **FW :** 311.77 **DEA schedule :** 2

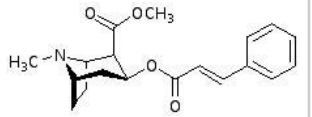


Catalog number : 9041-011 **CASRN :** 521-67-5

Name : (-)-*trans*-Cinnamoylcocaine

Mol. formula : $C_{19}H_{23}NO_4$ **FW :** 329.38 **DEA schedule :** 2

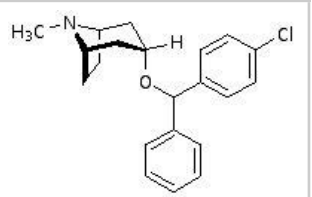
References : Novak, M; Salemink, CA; Khan, I *J Ethnopharmacol* **1984**, *10*, 261-74.



Catalog number : NOCD-004 **CASRN :** 5627-46-3

Name : Clobenztropine HCl

Mol. formula : $C_{21}H_{24}ClNO \bullet HCl$ **FW :** 378.35 **DEA schedule :** 0



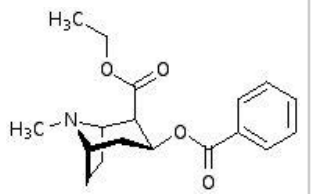
Catalog number : 9041-018

Name : (-)-Cocaethylene fumarate

Mol. formula : $C_{22}H_{27}NO_8$ **FW :** 433.45 **DEA schedule :** 2

Notes : *Cocaine metabolite.*

References : Hearn, WL; *et al. Pharmacol Biochem Behav* **1991**, *39*, 531-3.
Hearn, WL; *et al. J Neurochem* **1991**, *56*, 698-701.



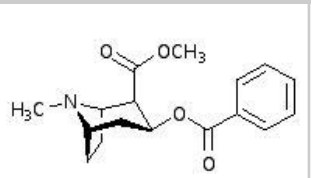
Catalog number : 9041-001 **CASRN :** 53-21-4

Name : (-)-Cocaine hydrochloride

Mol. formula : $C_{17}H_{22}ClNO_4$ **FW :** 339.81 **DEA schedule :** 2

Notes : *CNS stimulant; local anesthetic*

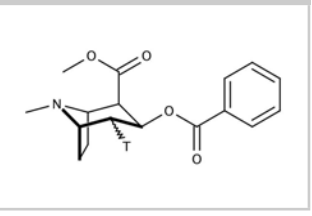
References : *Merck Index*, 14th ed., Monograph 2455.



Catalog number : 9041-004 **CASRN :** 85438-94-4

Name : (-)-[4-^{3}H]Cocaine

Mol. formula : $C_{17}H_{21}NO_4$ **FW :** 303.35 **DEA schedule :** 2



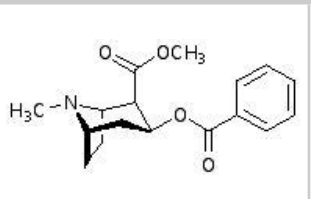
Catalog number : 9041-012 **CASRN :** 50-36-2

Name : (-)-Cocaine base

Mol. formula : $C_{17}H_{21}NO_4$ **FW :** 303.35 **DEA schedule :** 2

Notes : *CNS stimulant; local anesthetic*

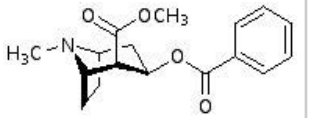
References : *Merck Index*, 14th ed., Monograph 2455.



Catalog number : 9041-020 **CASRN :** 47195-07-3

Name : (+)-Cocaine base

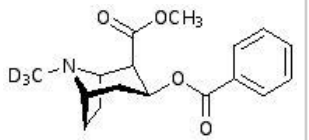
Mol. formula : $C_{17}H_{21}NO_4$ **FW :** 303.35 **DEA schedule :** 2



Catalog number : 9041-006

Name : (-)-[N-C^2H_3]Cocaine

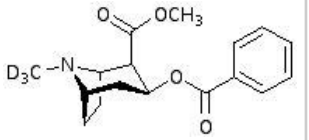
Mol. formula : $C_{17}H_{21}NO_4$ **FW :** 306.37 **DEA schedule :** 2



Catalog number : 9041-007

Name : (-)-[N-C^2H_3]Cocaine hydrochloride

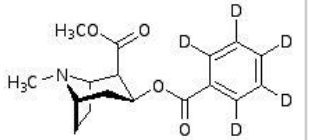
Mol. formula : $C_{17}H_{22}ClNO_4$ **FW :** 342.83 **DEA schedule :** 2



Catalog number : 9041-009

Name : (-)-[Phenyl-$^2H_5$]Cocaine

Mol. formula : $C_{17}H_{21}NO_4$ **FW :** 344.84 **DEA schedule :** 2

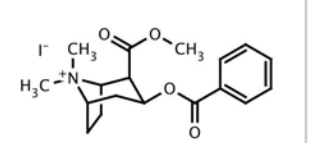


Catalog number : 9041-013 **CASRN :** 5937-29-1

Name : (-)-Cocaine methiodide

Mol. formula : $C_{18}H_{24}INO_4$ **FW :** 445.28 **DEA schedule :** 2

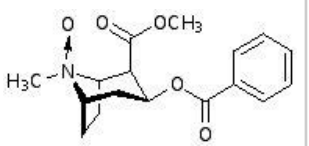
References : Abraham, P; Pitner, JB; Lewin, AH; Boja, JW; Kuhar, MJ; Carroll, FI *J Med Chem* **1992**, *35*, 141-4.



Catalog number : 9041-014

Name : (-)-Cocaine N-oxide hydrochloride

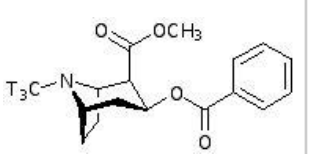
Mol. formula : $C_{17}H_{22}ClNO_5$ **FW :** 355.81 **DEA schedule :** 2



Catalog number : 9041-003

Name : (-)-[N-C^3H_3]Cocaine

Mol. formula : $C_{17}H_{21}NO_4$ **FW :** 309.38 **DEA schedule :** 2



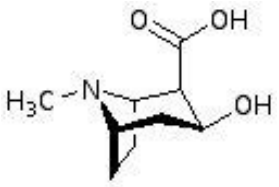
Catalog number : 9180-002 **CASRN :** 5796-31-6

Name : (-)-Ecgonine hydrochloride

Mol. formula : $C_9H_{16}ClNO_3$ **FW :** 221.69 **DEA schedule :** 2

Notes : *Cocaine metabolite.*

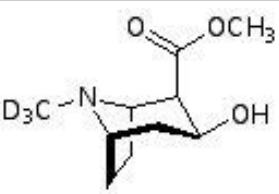
References : *Merck Index*, 14th ed., Monograph 3493.



Catalog number : 9180-007

Name : [N-C^2H_3]Ecgonine methyl ester hydrochloride

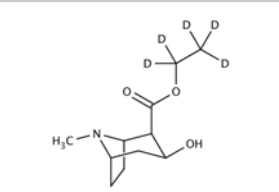
Mol. formula : $C_{10}H_{18}ClNO_3$ **FW :** 238.73 **DEA schedule :** 2



Catalog number : 9180-021 **CASRN :** 259526-73-3

Name : Ecgonine (1,1,2,2,2-$^2H_5$)ethyl ester perchlorate

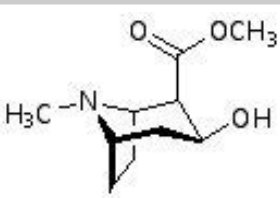
Mol. formula : $C_{11}H_{14}D_5NO_3 \bullet HClO_4$ **FW :** 318.76 **DEA schedule :** 2



Catalog number : 9180-006 **CASRN :** 7143-09-1

Name : (-)-Ecgonine methyl ester hydrochloride

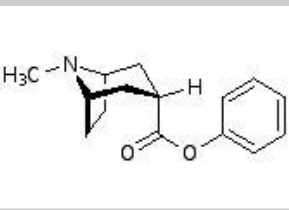
Mol. formula : $C_{10}H_{18}ClNO_3$ **FW :** 235.71 **DEA schedule :** 2



Catalog number : 9041-015

Name : Isotropacocaine hydrochloride

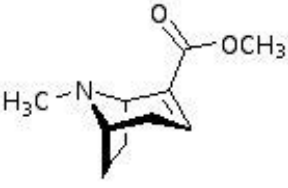
Mol. formula : $C_{15}H_{20}ClNO_2$ **FW :** 281.79 **DEA schedule :** 2



Catalog number : 9180-015

Name : (-)-Anhydroecgonine methyl ester fumarate; Methyl ecgonidine

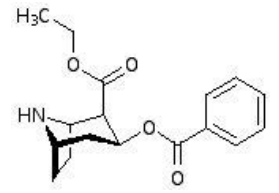
Mol. formula : $C_{14}H_{19}NO_6$ **FW :** 297.31 **DEA schedule :** 0



Catalog number : 9041-019 **CASRN :** 137220-02-1

Name : (-)-Norcocaethylene fumarate

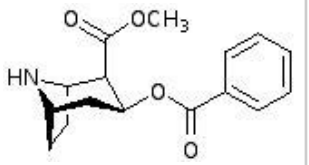
Mol. formula : $C_{21}H_{25}NO_8$ **FW :** 419.43 **DEA schedule :** 2



Catalog number : 9041-002 **CASRN :** 18717-72-1

Name : (-)-Norcocaine

Mol. formula : $C_{16}H_{19}NO_4$ **FW :** 289.32 **DEA schedule :** 2

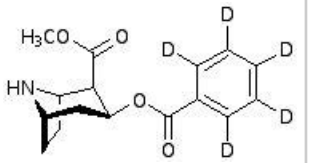


References : Wang, Q; Simpao, A; Sun L; Falk,JL; Lau, CE *Psychopharmacology (Berl)* **2001**, *153*, 341-52.
Kovacic, P *Med Hypotheses* **2005**, *64*, 350-6.

Catalog number : 9041-017

Name : (-)-[Phenyl-$^2H_5$]Norcocaine fumarate

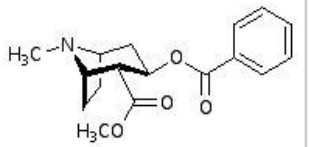
Mol. formula : $C_{20}H_{23}NO_8$ **FW :** 410.43 **DEA schedule :** 2



Catalog number : 9041-021 **CASRN :** 478-73-9

Name : (-)-Pseudococaine hydrochloride

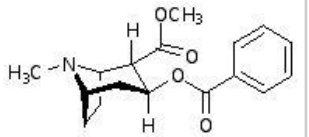
Mol. formula : $C_{17}H_{22}ClNO_4$ **FW :** 339.81 **DEA schedule :** 2



Catalog number : 9041-005 **CASRN :** 478-73-9

Name : (+)-Pseudococaine hydrochloride

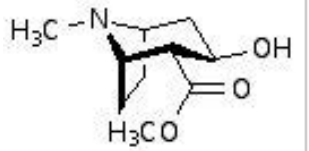
Mol. formula : $C_{17}H_{22}ClNO_4$ **FW :** 339.81 **DEA schedule :** 2



Catalog number : 9180-020

Name : (-)-Pseudoecgonine methyl ester

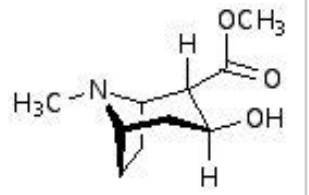
Mol. formula : $C_{10}H_{17}NO_3$ **FW :** 199.25 **DEA schedule :** 2



Catalog number : 9180-005

Name : (+)-Pseudoecgonine methyl ester

Mol. formula : $C_{10}H_{17}NO_3$ **FW :** 199.25 **DEA schedule :** 2



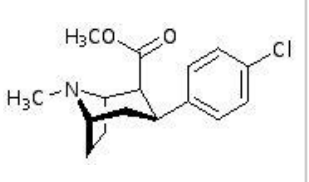
Catalog number : NOCD-020 **CASRN :** 130342-80-2

Name : (-)-3β-(4-Chlorophenyl)tropan-2β-carboxylic acid methyl ester tartrate salt; RTI-31

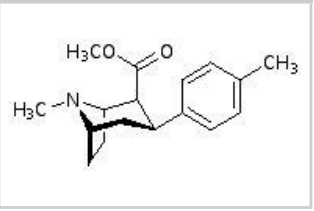
Mol. formula : $C_{20}H_{26}ClNO_8$ **FW :** 443.87 **DEA schedule :** 0

Notes : *Nonselective monoamine uptake inhibitor.*

References : Carroll, FI; *et al. J Med Chem* **1995**, *38*, 379-88.



Catalog number : NOCD-021 **CASRN :** 130342-81-3



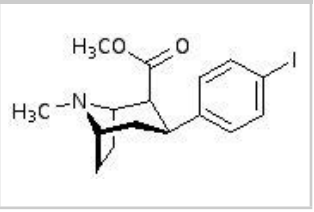
Name : (-)-3β-(4-Methylphenyl)tropan-2β-carboxylic acid methyl ester tartrate; RTI-32

Mol. formula : $C_{21}H_{29}NO_8$ **FW :** 423.46 **DEA schedule :** 0

Notes : *Nonselective monoamine uptake inhibitor.*

References : Boja, JW; Carroll, FI; Rahman, MA; Philip, A; Lewin, AH; Kuhar, MJ *Eur J Pharmacol* **1990**, *184*, 329-32.

Catalog number : NOCD-025 **CASRN :** 133647-95-7



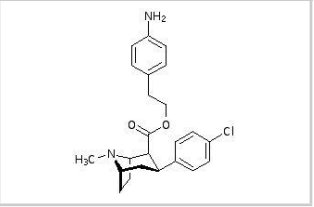
Name : (-)-3β-(4-Iodophenyl)tropan-2β-carboxylic acid methyl ester tartrate; RTI-55

Mol. formula : $C_{20}H_{26}INO_8$ **FW :** 535.32 **DEA schedule :** 0

Notes : *Nonselective monoamine uptake inhibitor.*

References : Boja, JW; *et al. Eur J Pharmacol* **1991**, *194*, 133-4.
Carroll, FI; *et al. J Med Chem* **1991**, *34*, 2719-25.
Carroll, FI; *et al. J Med Chem* **1995**, *38*, 379-88.

Catalog number : NOCD-029

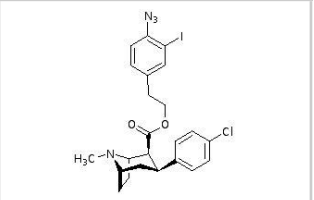


Name : (-)-3β-(4-Chlorophenyl)tropan-2β-carboxylic acid (4'-aminophenyl)ethyl ester dihydrochloride; RTI-75

Mol. formula : $C_{23}H_{29}Cl_3N_2O_2$ **FW :** 471.86 **DEA schedule :** 0

References : Carroll, FI; *et al. J Med Chem* **1992**, *35*, 1813-7.

Catalog number : NOCD-030



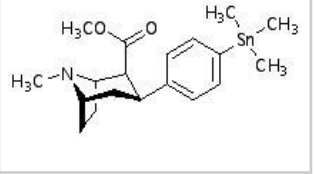
Name : (-)-3β-(4-Chlorophenyl)tropan-2β-carboxylic acid (4'-Azido-3'-iodophenyl)ethyl ester hydrochloride; RTI-82

Mol. formula : $C_{23}H_{25}Cl_2IN_4O_2$ **FW :** 587.29 **DEA schedule :** 0

Notes : *Dopamine transporter photoaffinity ligand.*

References : Carroll, FI; *et al. J Med Chem* **1992**, *35*, 1813-7.

Catalog number : NOCD-031



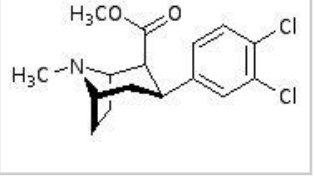
Name : 3β-[4-(Trimethylstannyl)phenyl]tropan-2β-carboxylic acid methyl ester; RTI-89

Mol. formula : $C_{19}H_{29}NO_2Sn$ **FW :** 422.12 **DEA schedule :** 0

Notes : *Precursor for the synthesis of [^{125}I]- and [^{123}I]-RTI-55.*

References : Carroll, FI; *et al. Med Chem Res* **1991**, *1*, 289-294.

Catalog number : NOCD-028



Name : (-)-3β-(3,4-Dichlorophenyl)tropan-2β-carboxylic acid methyl ester hydrochloride; RTI-111

Mol. formula : $C_{16}H_{20}Cl_3NO_2$ **FW :** 364.70 **DEA schedule :** 0

Notes : *Nonselective monoamine uptake inhibitor.*

References : Carroll, FI; *et al. J Med Chem* **1995**, *38*, 379-88.

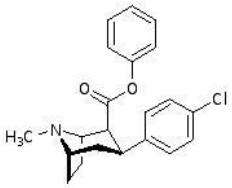
Catalog number : NOCD-026 **CASRN :** 316790-73-5

Name : (-)-3β-(4-Chlorophenyl)tropan-2β-carboxylic acid phenyl ester hydrochloride; RTI-113

Mol. formula : $C_{21}H_{25}Cl_2NO_3$ **FW :** 410.32 **DEA schedule :** 0

Notes : *Selective dopamine uptake inhibitor.*

References : Carroll, FI; *et al. J Med Chem* **1995**, *38*, 379-88.

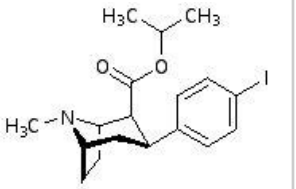


Catalog number : NOCD-027 **CASRN :** 146145-21-3

Name : (-)-3β-(4-Iodophenyl)tropan-2β-carboxylic acid isopropyl ester hydrochloride; RTI-121; IPCIT

Mol. formula : $C_{18}H_{25}ClINO_4$ **FW :** 449.74 **DEA schedule :** 0

References : Carroll, FI; *et al. J Med Chem* **1995**, *38*, 379-88.

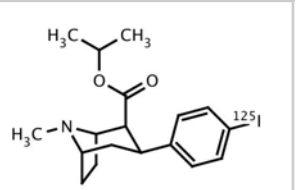


Catalog number : NOCD-077

Name : [^{125}I]RTI-121

Mol. formula : $C_{18}H_{24}INO_2$ **FW :** 413.29 **DEA schedule :** 0

References : Scheffel, U; *et al. Neuroreport* **1992**, *3*, 969-72.
Carroll, FI*; et al. J Med Chem* **1995**, *38*, 379-88.



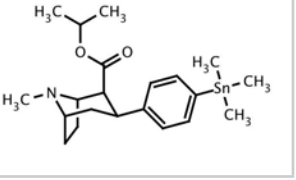
Catalog number : NOCD-032

Name : (-)-3β-[4-(Trimethylstannyl)phenyl]tropan-2β-carboxylic acid isopropyl ester; RTI-136

Mol. formula : $C_{21}H_{33}NO_2Sn$ **FW :** 450.19 **DEA schedule :** 0

Notes : *Precursor for the synthesis of [^{125}I]- and [^{123}I]-RTI-121.*

References : Carroll, FI; *et al. Med Chem Res* **1991**, *1*, 289-294.

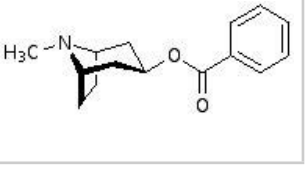


Catalog number : 9041-016 **CASRN :** 637-23-0

Name : Tropacocaine hydrochloride

Mol. formula : $C_{15}H_{20}ClNO_2$ **FW :** 281.79 **DEA schedule :** 2

References : Novak, M; Salemink, CA; Khan, I *J Ethnopharmacol* **1984**, *10*, 261-74.
Meyer, EM; *et al. J Pharmacol Exp Ther* **1990**, *254*, 584-90.



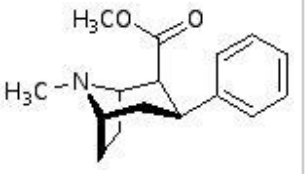
Catalog number : NOCD-023 **CASRN :** 50372-80-0

Name : (-)-3β-Phenyltropan-2β-carboxylic acid methyl ester tartrate; WIN 35,065-2

Mol. formula : $C_{20}H_{27}NO_8$ **FW :** 409.43 **DEA schedule :** 0

Notes : *Nonselective monoamine uptake inhibitor.*

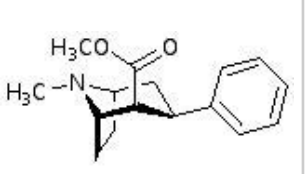
References : Carroll, FI; *et al. J Med Chem* **1995**, *38*, 379-88.



Catalog number : NOCD-024

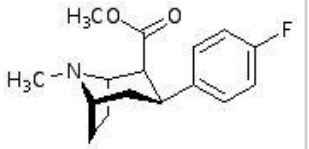
Name : (+)-3β-Phenyltropan-2β-carboxylic acid methyl ester tartrate; WIN 35,065-3

Mol. formula : $C_{20}H_{27}NO_8$ **FW :** 409.43 **DEA schedule :** 0



Catalog number : NOCD-022 **CASRN :** 50370-56-4

Name : (-)-3β-(4-Fluorophenyl)tropan-2β-carboxylic acid methyl ester tartrate; WIN 35,428



Mol. formula : $C_{20}H_{26}FNO_8$ **FW :** 427.42 **DEA schedule :** 0

Notes : *Nonselective monoamine uptake inhibitor.*

References : Carroll, FI; *et al. J Med Chem* **1995**, *38*, 379-88.

Stimulants (dosage form): Stock Solutions

Catalog number : 9041-022

Name : Injectable cocaine hydrochloride (10 mg/mL and 20 mg/mL)

DEA schedule : 2

Notes : ***Not for human use.***

Dosage Form

NIH
National Institute
on Drug Abuse

Miscellaneous: Dopaminergic

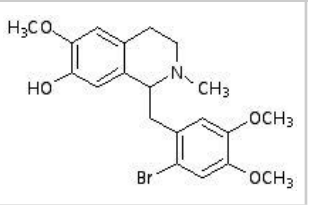
Catalog number : MEDD-002

Name : (±)-1-(2-Bromo-4,5-dimethoxybenzyl)-7-hydroxy-6-methoxy-2-methyl-1,2,3,4-tetrahydroisoquinoline hydrobromide; A69024 HBr

Mol. formula : $C_{20}H_{25}Br_2NO_4$ **FW :** 503.23 **DEA schedule :** 0

Notes : *Dopamine D1 receptor antagonist*

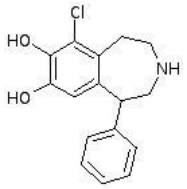
References : Caine, SB; Koob, GF., *J Pharmacol Exp Ther* **1994**, *270*, 209-18.



Catalog number : MEDD-004

Name : (±)-6-Chloro-7,8-dihydroxy-1-phenyl-2,3,4,5-tetrahydro[1H]-3-benzazepine hydrobromide

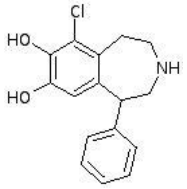
Mol. formula : $C_{16}H_{17}BrClNO_2$ **FW :** 370.67 **DEA schedule :** 0



Catalog number : MEDD-005

Name : (±)-6-Chloro-7,8-dihydroxy-1-phenyl-2,3,4,5-tetrahydro[1H]-3-benzazepine hydrochloride

Mol. formula : $C_{16}H_{17}Cl_2NO_2$ **FW :** 326.22 **DEA schedule :** 0



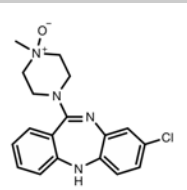
Catalog number : NOCD-135 **CASRN :** 34233-69-7

Name : Clozapine N-oxide

Mol. formula : $C_{18}H_{19}ClN_4O$ **FW :** 342.82 **DEA schedule :** 0

Notes : *Clozapine metabolite.*

References : Jann, MW; *et al., Clin Pharmacokinet* **1993**, *24*, 161-76.
Nawaratne, V; *et al., Mol Pharmacol* **2008**, *74*, 1119-31.
Becnel, J; *et al., Cell Rep* **2013**, *4*, 1049-59.



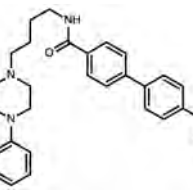
Catalog number : NOCD-047 **CASRN :** 162408-66-4

Name : GR103691

Mol. formula : $C_{30}H_{37}N_3O_3$ **FW :** 566.57 **DEA schedule :** 0

Notes : *Selective dopamine D3 receptor antagonist*

References : Audinot, V; *et al. J Pharmacol Exp Ther* **1998**, *287*, 187-97.



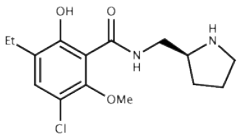
Catalog number : NOCD-120 **CASRN :** 101536-82-7

Name : (+)-(*S*)-Noreticlopride HCl

Mol. formula : $C_{15}H_{22}Cl_2N_2O_3$ **FW :** 349.26 **DEA schedule :** 0

Notes : *Dopamine D2 receptor antagonist.*

References : de Paulis, T; Hall H; Ogren SO, *European Journal of Medicinal Chemistry* **1985**, *20*, 273-276.



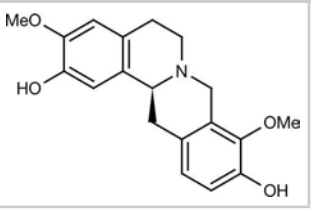
Catalog number : NOCD-014 **CASRN :** 16562-13-3

Name : L-Stepholidine

Mol. formula : $C_{19}H_{21}NO_4$ **FW :** 327.37 **DEA schedule :** 0

Notes : *D1 agonist / D2 antagonist*

References : Mo, J; *et al. Curr Med Chem* **2007**, *14*, 2996-3002.
Wang, W; *et al. Neuropharmacology* **2007**, *52*, 355-61.



Miscellaneous: Enzyme Inhibitors

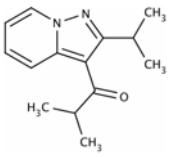
Catalog number : NOCD-104 **CASRN :** 50847-11-5

Name : Ibudilast

Mol. formula : $C_{14}H_{18}N_2O$ **FW :** 230.31 **DEA schedule :** 0

Notes : *Orally-available phosphodiesterase inhibitor. Induces cerebral vasodilation.*

References : (1) Nishino, K; et al., *Jpn J Pharmacol* **1983**, *33*, 267-78; (2) Souness, JE; et al., *Br J Pharmacol* **1994**, *111*, 1081-8.



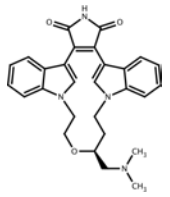
Catalog number : NOCD-127 **CASRN :** 169939-94-0

Name : Ruboxistaurin; LY-333,531

Mol. formula : $C_{28}H_{28}N_4O_3$ **FW :** 468.55 **DEA schedule :** 0

Notes : *PKCβ inhibitor.*

References : Gani O, Engh RA, *Nat Prod Rep,* **2010**, *27*, 489.



Miscellaneous: GABA Receptor Related

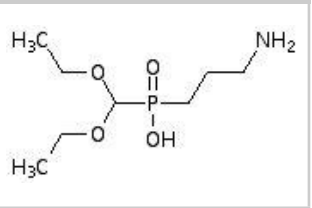
Catalog number : NOCD-045 **CASRN :** 123690-79-9

Name : (3-Aminopropyl)(diethoxymethyl)phosphinic acid; CGP-35348

Mol. formula : $C_8H_{20}NO_4P$ **FW :** 225.23 **DEA schedule :** 0

Notes : *GABAB receptor antagonist.*

References : Olpe, HR; *et al. Eur J Pharmacol* **1990**, *187*, 27-38.



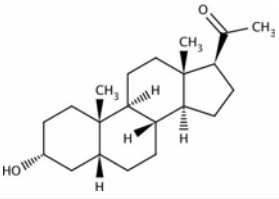
Catalog number : NOCD-102 **CASRN :** 128-20-1

Name : Pregnanolone

Mol. formula : $C_{21}H_{34}O_2$ **FW :** 318.49 **DEA schedule :** 0

Notes : *Progesterone metabolite and barbiturate-like modulator of $GABA_A$ receptors.*

References : Quinton, MS; *et al.* Pharmacol Biochem Behav **2006**, *85*, 385-92.
Kaminski, RM; *et al.* Eur J Pharmacol **2003**, *474*, 217-22.
Leskiewicz, M; *et al.* Pol J Pharmacol **2003**, *55*, 1131-6.



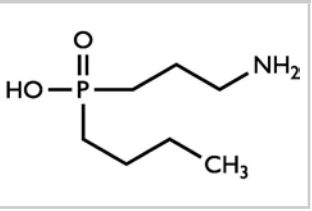
Catalog number : NOCD-103 **CASRN :** 145537-81-1

Name : SGS-742; CGP-36742

Mol. formula : $C_7H_{18}NO_2P$ **FW :** 179.19 **DEA schedule :** 0

Notes : *$GABA_B$ receptor antagonist.*

References : Bullock, R Curr Opin Investig Drugs 2005, 6, 108-13.
Froestl, W; et al. Biochem Pharmacol 2004, 68, 1479-87.



Miscellaneous: GHB Receptor Related

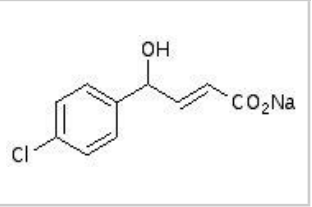
Catalog number : NOCD-044

Name : *trans*-4-(4-Chlorophenyl)-4-hydroxy-2-butenoic acid sodium salt; NCS 356

Mol. formula : $C_{10}H_8ClO_3Na$ **FW :** 234.61 **DEA schedule :** 0

Notes : *γ-Hydroxybutyrate receptor agonist.*

References : Gobaille, S; *et al. J Pharmacol Exp Ther* **1999**, *290*, 303-9.



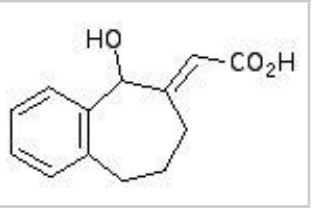
Catalog number : NOCD-042

Name : 6,7,8,9-Tetrahydro-5-[H]benzocycloheptene-5-ol-4-ylideneacetic acid; NCS 382

Mol. formula : $C_{13}H_{14}O_3$ **FW :** 218.25 **DEA schedule :** 0

Notes : *γ-Hydroxybutyrate receptor antagonist; anticonvulsant.*

References : Maitre, M; *et al. J Pharmacol Exp Ther* **1990**, *255*, 657-63.



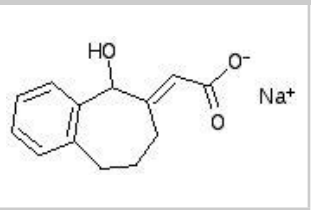
Catalog number : NOCD-043 **CASRN :** 131733-92-1

Name : 6,7,8,9-Tetrahydro-5-[H]benzocycloheptene-5-ol-4-ylideneacetic acid, sodium salt; NCS 382 sodium salt

Mol. formula : $C_{13}H_{13}O_3Na$ **FW :** 240.24 **DEA schedule :** 0

Notes : *γ-Hydroxybutyrate receptor antagonist; anticonvulsant.*

References : Maitre, M; *et al. J Pharmacol Exp Ther* **1990**, *255*, 657-63.



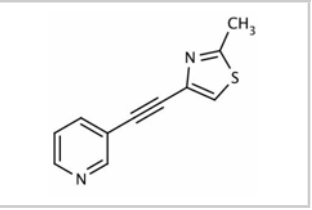
Miscellaneous: Glutamate Receptor Related

Catalog number : MEDD-026 **CASRN :** 329205-68-7

Name : 3-[(2-Methyl-4-thiazolyl)ethynyl]pyridine; MTEP

Mol. formula : $C_{11}H_8N_2S$ **FW :** 200.26 **DEA schedule :** 0

References : Bradbury, MJ; *et al. J Pharmacol Exp Ther* **2005**, *313*, 395-402.
Klodzinska, A; *et al. Neuropharmacology* **2004**, *47*, 342-50.
Busse, CS; *et al. Neuropsychopharmacology* **2004**, *29*, 1971-9.

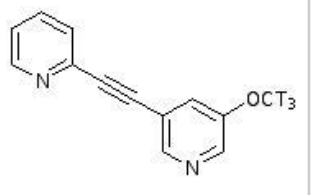


Catalog number : NOCD-058

Name : 3-[$^3H_3$]Methoxy-5-(pyridin-2-yl-ethynyl)pyridine

Mol. formula : $C_{13}H_{10}N_2O$ **FW :** 216.26 **DEA schedule :** 0

Notes : *Tritium-labeled MPEP analog*



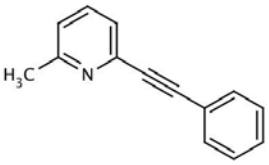
Catalog number : MEDD-018 **CASRN :** 219911-35-0

Name : 6-Methyl-2-(phenylethynyl)pyridine hydrochloride; MPEP

Mol. formula : $C_{14}H_{12}ClN$ **FW :** 229.71 **DEA schedule :** 0

Notes : *mGlu5 antagonist*

References : Gasparini, F; *et al. Neuropharmacology* **1999**, *38*, 1493-503.
Alagille, D; *et al. Bioorg Med Chem* **2005**, *13*, 197-209.

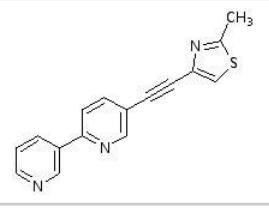


Catalog number : NOCD-033 **CASRN :** 329204-25-3

Name : 5-[(2-Methyl-4-thiazolyl)ethynyl]-2,3'-bipyridine; MTEb

Mol. formula : $C_{16}H_{11}N_3S$ **FW :** 277.34 **DEA schedule :** 0

References : Roppe, JR; *et al. Bioorg Med Chem Lett* **2004**, *14*, 3993-3996.

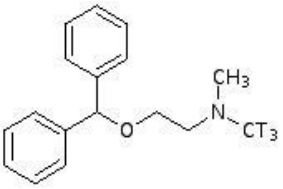


Miscellaneous: Histamine Receptor Related

Catalog number : NOCD-063

Name : [N-C^3H_3]Diphenhydramine

Mol. formula : $C_{17}H_{21}NO$ **FW :** 261.38 **DEA schedule :** 0

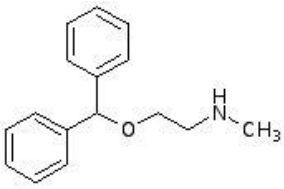


Catalog number : NOCD-060

Name : Nordiphenhydramine hydrochloride

Mol. formula : $C_{16}H_{20}ClNO$ **FW :** 277.80 **DEA schedule :** 0

Notes : *Diphenhydramine metabolite*

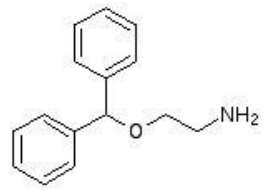


Catalog number : NOCD-061

Name : Dinordiphenhydramine hydrochloride

Mol. formula : $C_{15}H_{18}ClNO$ **FW :** 263.76 **DEA schedule :** 0

Notes : *Diphenhydramine metabolite*



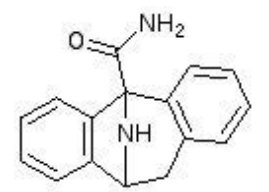
Miscellaneous: NMDA Receptor Related

Catalog number : MEDD-003

Name : (±)-5-(Aminocarbonyl)-10,11-dihydro-5H-dibenzo[a,d]cyclohepten-5,10-imine hydrochloride; ADCI HCl

Mol. formula : $C_{16}H_{15}ClN_2O$ **FW :** 286.76 **DEA schedule :** 0

Notes : *NMDA channel blocker*



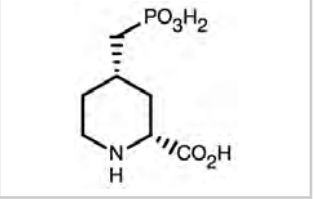
Catalog number : NOCD-019 **CASRN :** 110347-85-8

Name : CGS 19755; Selfotel

Mol. formula : $C_7H_{14}NO_5P$ **FW :** 223.16 **DEA schedule :** 0

Notes : *NMDA receptor antagonist.*

References : Hutchison, AJ; *et al. J Med Chem* **1989**, *32*, 2171-8.



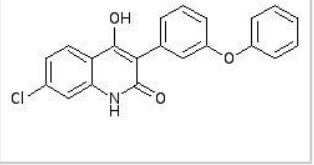
Catalog number : NOCD-010 **CASRN :** 142326-59-8

Name : 7-Chloro-4-hydroxy-3-(3-phenoxyphenyl)-2(1H)quinoline; L 701,324

Mol. formula : $C_{21}H_{14}ClNO_3$ **FW :** 363.79 **DEA schedule :** 0

Notes : *Glycine/NMDA receptor antagonist.*

References : Bristow, LJ; *et al. Psychopharmacology (Berl)* **1995**, *118*, 230-2.
Bristow, LJ; *et al. J Pharmacol Exp Ther* **1996**, *279*, 492-501.



Miscellaneous: Orexin Receptor Related

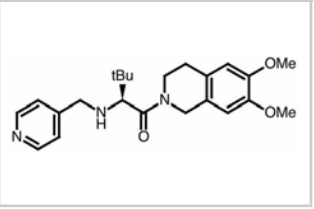
Catalog number : NOCD-111 **CASRN :** 372523-75-6

Name : Cp-5

Mol. formula : $C_{23}H_{33}ClN_3O_3$ **FW :** 470.44 **DEA schedule :** 0

Notes : *Non-peptidic orexin-2 receptor selective antagonist.*

References : Hirose, M, *et al.*, *Bioorg Med Chem Letters,* **2003**, *13*, 4497-4499.



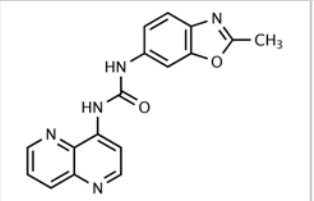
Catalog number : NOCD-006 **CASRN :** 249889-64-3

Name : SB-334867 (base)

Mol. formula : $C_{17}H_{13}N_5O_2$ **FW :** 392.24 **DEA schedule :** 0

Notes : *Orexin (hypocretin) antagonist*

References : Coe, JW; et al., *Bioorg Med Chem Lett*, **2005**, *15*, 4889-4897.
McElhinny, CJ, Jr.; *et al., Bioorg Med Chem Lett*, **2012**, *22*, 6661-6664.



Miscellaneous: Serotonergic

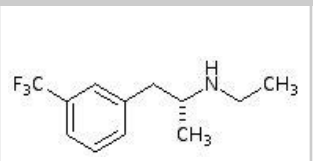
Catalog number : 1670-002 **CASRN :** 3616-78-2

Name : (-)-Fenfluramine hydrochloride

Mol. formula : $C_{12}H_{17}ClF_3N$ **FW :** 267.72 **DEA schedule :** 4

Notes : *CNS stimuant*

References : *Merck Index*, 14th ed., Monograph 3973.



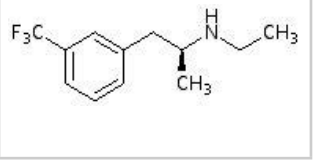
Catalog number : 1670-001 **CASRN :** 3239-45-0

Name : (+)-Fenfluramine hydrochloride

Mol. formula : $C_{12}H_{17}ClF_3N$ **FW :** 267.72 **DEA schedule :** 4

Notes : *CNS stimuant; serotonin releaser*

References : *Merck Index*, 14th ed., Monograph 3973.



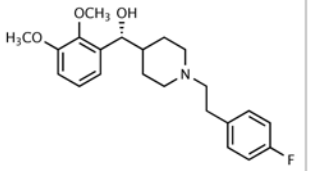
Catalog number : NOCD-015 **CASRN :** 139290-65-6

Name : MDL-100907; Volinanserin

Mol. formula : $C_{22}H_{29}ClFNO_3$ **FW :** 418.94 **DEA schedule :** 0

Notes : *5-HT$_{2A}$ antagonist*

References : Ullrich, T; Rice KCBioorg Med Chem **2000**, *8*, 2427-32.

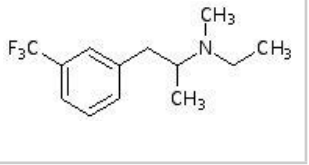


Catalog number : 1670-003

Name : (±)-N-Methylfenfluramine hydrochloride

Mol. formula : $C_{13}H_{19}ClF_3N$ **FW :** 281.75 **DEA schedule :** 0

Notes : *CNS stimuant*



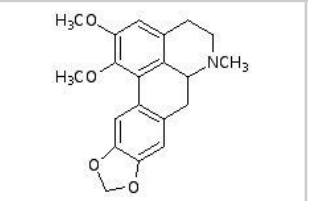
Catalog number : NOCD-048 **CASRN :** 2565-01-7

Name : Nantenine

Mol. formula : $C_{20}H_{21}NO_4$ **FW :** 339.39 **DEA schedule :** 0

Notes : *Serotonergic receptor antagonist.*

References : Fantegrossi, WE; *et al. Psychopharmacology (Berl)* **2004**, *173*, 270-7.



Cannabinoids: Cannabichromene Class

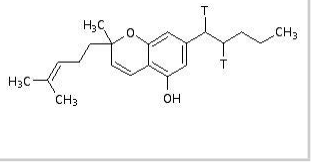
Catalog number : 7360-008 **CASRN :** 20675-51-8 (parent cmpd)

Name : [1',2'-$^3H_2$]Cannabichromene

Mol. formula : $C_{21}H_{30}O_2$ **FW :** 314.46 **DEA schedule :** 1

Notes : *Non-psychoactive constituent of cannabis (tritium-labeled).*

References : *Instrumental Data for Drug Analysis*, 2nd Ed., **1996**, Volume 1, p304.



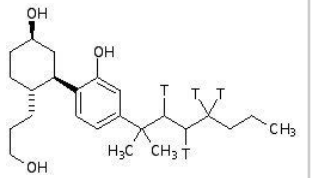
Cannabinoids: Cannabicyclohexanol Class

Catalog number : NOCD-092 **CASRN :** 119095-48-6

Name : [2,3,4,4-$^3H_4$](-)-CP 55,940

Mol. formula : $C_{24}H_{40}O_3$ **FW :** 376.58 **DEA schedule :** 0

Notes : *High affinity CB1 and CB2 receptor radioligand (tritium-labeled).*

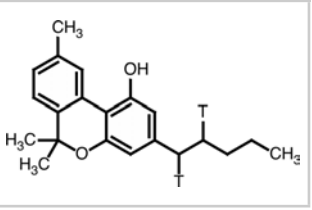


Cannabinoids: Cannabinol Class

Catalog number : 7360-023

Name : [1',2'-$^3H_2$]Cannabinol

Mol. formula : $C_{21}H_{26}O_2$ **FW :** 310.43 **DEA schedule :** 1

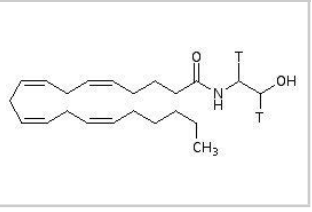


Cannabinoids: Fatty Acid Derivatives (Anandamides)

Catalog number : NOCD-008

Name : Arachidonyl[1,2-^{3}H]ethanolamide; Tritiated Anandamide

Mol. formula : $C_{22}H_{37}NO_2$ **FW :** 347.54 **DEA schedule :** 0

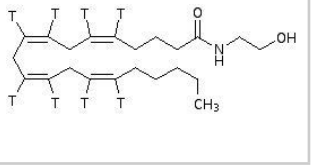


Catalog number : NOCD-078

Name : Tritium-labeled Arachidonylethanolamide; Tritiated Anandamide

Mol. formula : $C_{22}H_{37}NO_2$ **FW :** 347.54 **DEA schedule :** 0

Notes : *Cannabinoid CB1 and CB2 receptor radioligand.*



Cannabinoids: Fatty Acid Derivatives (Arachidonyl esters)

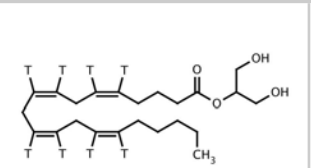
Catalog number : NOCD-018

Name : [^{3}H]-2-Arachidonylglycerol; [^{3}H]-2-AG

Mol. formula : $C_{23}H_{38}O_4$ **FW :** 378.55 **DEA schedule :** 0

Notes : *Cannabinoid CB1 receptor agonist (tritium-labeled).*

References : Stella, N; Schweitzer, P; Piomelli, D *Nature* **1997**, *388*, 773-8.



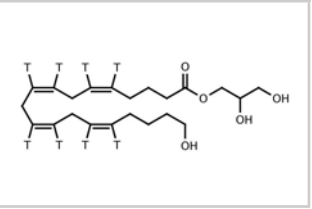
Catalog number : NOCD-035

Name : Tritium-labeled 1-Arachidonylglycerol; [^{3}H]-1-AG

Mol. formula : $C_{23}H_{38}O_4$ **FW :** 378.55 **DEA schedule :** 0

Notes : *Cannabinoid CB1 receptor agonist (tritium-labeled).*

References : Stella, N; Schweitzer, P; Piomelli D *Nature* **1997**, *388*, 773-8.



Cannabinoids: Pyrazole Class

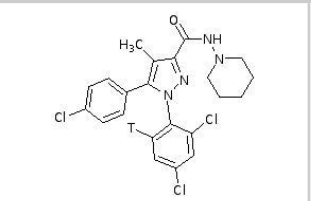
Catalog number : NOCD-083 **CASRN :** 170937-38-9

Name : [2,4-Dichlorophenyl-6-^{3}H]SR141716

Mol. formula : $C_{22}H_{21}Cl_3N_4O$ **FW :** 465.80 **DEA schedule :** 0

Notes : *Cannabinoid CB1 receptor radioligand (tritium-labeled).*

References : Seltzman, H; *et al. J Chem Soc, Chem Commun* **1995**, 1549-1550.



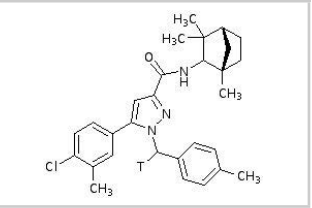
Catalog number : NOCD-086 **CASRN :** 475471-24-0

Name : Tritium-labeled SR144528

Mol. formula : $C_{29}H_{34}N_3OCl$ **FW :** 478.05 **DEA schedule :** 0

Notes : *Cannabinoid CB2 receptor radioligand (tritium-labeled).*

References : Portier, M; *et al. J Pharmacol Exp Ther* **1999**, *288*, 582-9.
Rinaldi-Carmona, M; *et al. J Pharmacol Exp Ther* **1998**, *284*, 644-50.



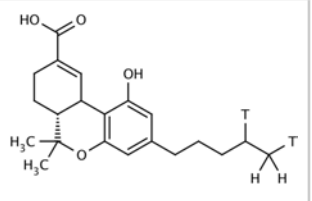
Cannabinoids: Tetrahydrocannabinol Class

Catalog number : 7370-017

Name : [4',5'-$^3H_2$]9-Carboxy-11-*nor*-Δ^9-THC

Mol. formula : $C_{21}H_{28}O_4$ **FW :** 348.46 **DEA schedule :** 1

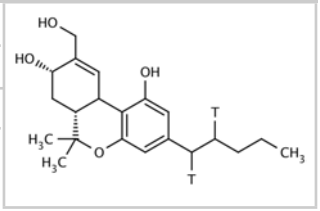
Notes : *Urinary metabolite of THC (tritium-labeled).*



Catalog number : 7370-026

Name : [1',2'-$^{3}H_2$]-8α,11-Dihydroxy-Δ^{9}-THC

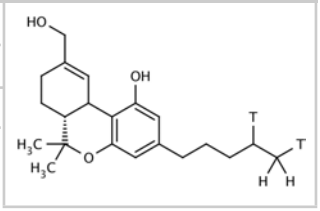
Mol. formula : $C_{21}H_{30}O_4$ **FW :** 350.48 **DEA schedule :** 1



Catalog number : 7370-024

Name : [4',5'-$^{3}H_2$]-11-Hydroxy-Δ^{9}-THC

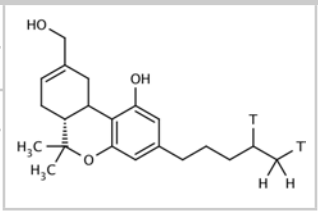
Mol. formula : $C_{21}H_{30}O_2$ **FW :** 318.48 **DEA schedule :** 1



Catalog number : 7370-035

Name : [4',5'-$^{3}H_2$]-11-Hydroxy-Δ^{8}-THC

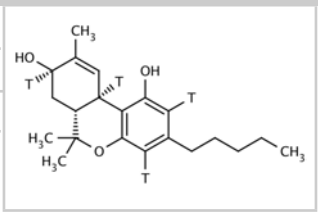
Mol. formula : $C_{21}H_{30}O_2$ **FW :** 318.48 **DEA schedule :** 1



Catalog number : 7370-021

Name : [2,4,8,10a-$^{3}H_4$]-8β-Hydroxy-Δ^{9}-THC

Mol. formula : $C_{21}H_{30}O_3$ **FW :** 338.49 **DEA schedule :** 1

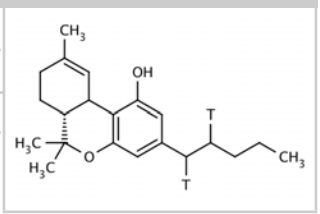


Catalog number : 7370-004

Name : [1',2'-$^{3}H_2$]Δ^{9}-THC

Mol. formula : $C_{21}H_{30}O_2$ **FW :** 318.48 **DEA schedule :** 1

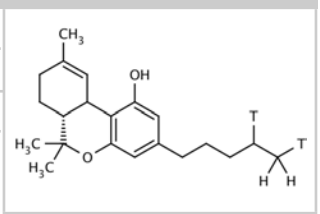
Notes : *Hallucinogen; psychotropic; analgesic (tritium-labeled).*



Catalog number : 7370-009

Name : [4',5'-^{3}H]Δ^{9}-THC

Mol. formula : $C_{21}H_{30}O_2$ **FW :** 318.48 **DEA schedule :** 1

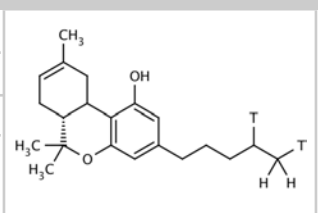


Catalog number : 7370-027

Name : [4',5'-$^{3}H_2$]Δ^{8}-THC

Mol. formula : $C_{21}H_{30}O_2$ **FW :** 318.48 **DEA schedule :** 1

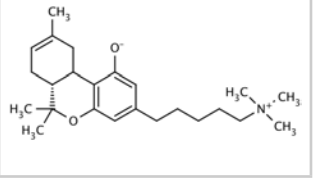
Notes : *Hallucinogen; psychotropic; analgesic (tritium-labeled).*



Catalog number : 7370-052

Name : [$^{3}H_3$]-5'-Trimethylammonium-Δ^8-THC phenolate

Mol. formula : $C_{24}H_{37}NO_2$ **FW :** 371.56 **DEA schedule :** 1

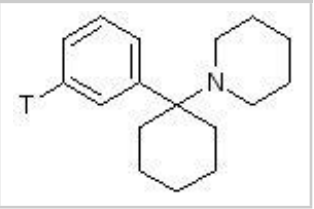


Dissociatives: Phencyclidine Class

Catalog number : 7471-001

Name : [Phenyl-3-^{3}H(n)]Phencyclidine; [Phenyl-3-^{3}H(n)]PCP

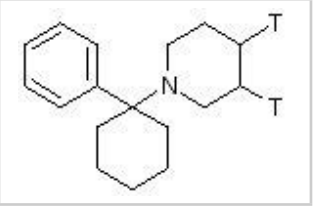
Mol. formula : $C_{17}H_{25}N$ **FW :** 245.40 **DEA schedule :** 2



Catalog number : 7471-043

Name : [3',4'-^{3}H]Phencyclidine; [3,4-^{3}H]PCP

Mol. formula : $C_{17}H_{25}N$ **FW :** 247.4 **DEA schedule :** 2

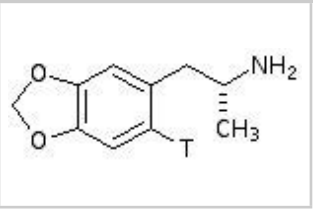


Hallucinogens: Amphetamine Class

Catalog number : 7400-006 **CASRN :** 6292-91-7

Name : (-)-[6'-$^{3}H_2$(n)]-3',4'-Methylenedioxyamphetamine hydrochloride; (-)-[6'-$^{3}H_2$(n)]MDA

Mol. formula : $C_{10}H_{14}ClNO_2$ **FW :** 217.68 **DEA schedule :** 1

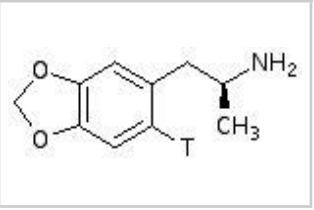


Catalog number : 7400-004

Name : (+)-[6'-^{3}H(n)-3',4'-Methylenedioxyamphetamine hydrochloride; (+)-[6'-^{3}H(n)MDA

Mol. formula : $C_{10}H_{14}ClNO_2$ **FW :** 215.68 **DEA schedule :** 1

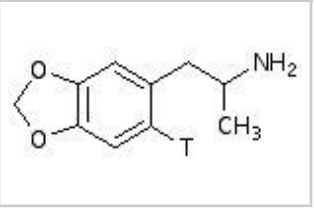
Notes : *Hallucinogen (tritium-labeled).*



Catalog number : 7400-005

Name : [6-$^{3}H_2$(n)]-3,4-Methylenedioxyamphetamine hydrochloride; [6-$^{3}H_2$(n)]MDA

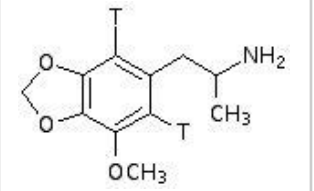
Mol. formula : $C_{10}H_{14}ClNO_2$ **FW :** 217.68 **DEA schedule :** 1



Catalog number : 7401-002

Name : [2',6'-^{3}H(n)]-3-Methoxy-4,5-methylenedioxyamphetamine hydrochloride; [2,6-^{3}H(n)]MMDA

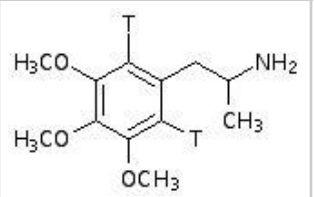
Mol. formula : $C_{11}H_{16}ClNO_3$ **FW :** 249.72 **DEA schedule :** 1



Catalog number : 7390-002

Name : (±)-[2,6-$^{3}H_2$(n)]-3,4,5-Trimethoxyamphetamine hydrochloride

Mol. formula : $C_{12}H_{20}ClNO_3$ **FW :** 265.76 **DEA schedule :** 1

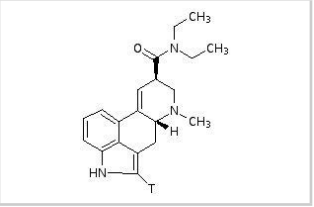


Hallucinogens: Ergot alkaloids

Catalog number : 7315-007 **CASRN :** 377756-22-4

Name : [2-^{3}H]-(+)-Lysergic acid diethylamide; (+)-[3H]-LSD

Mol. formula : $C_{20}H_{25}N_3O$ **FW :** 323.42 **DEA schedule :** 1



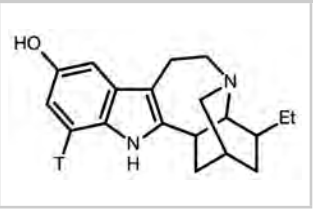
Hallucinogens: Ibogaine Class

Catalog number : 7260-005

Name : [12-^{3}H]-Noribogaine

Mol. formula : $C_{19}H_{24}N_2O$ **FW :** 296.41 **DEA schedule :** 0

Notes : *Ibogaine-like effect without tremors (tritium-labeled).*

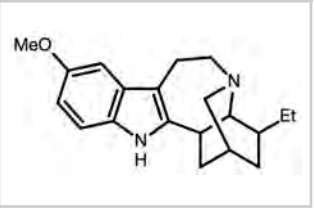


Catalog number : 7260-002 **CASRN :** 146560-35-2

Name : Tritium-labeled Ibogaine; [12-^{3}H]Ibogaine

Mol. formula : $C_{20}H_{26}N_2O$ **FW :** 312.44 **DEA schedule :** 1

Notes : *Hallucinogen (tritium-labeled).*



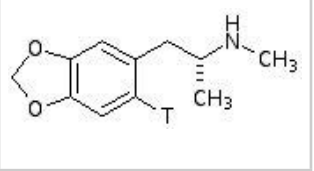
Hallucinogens: Methamphetamine Class

Catalog number : 7405-005 **CASRN :** 4764-17-4

Name : (-)-[6'-^{3}H(n)]-3',4'-Methylenedioxymethamphetamine hydrochloride; (-)-[^{3}H]MDMA

Mol. formula : $C_{11}H_{16}ClNO_2$ **FW :** 231.71 **DEA schedule :** 1

Notes : *CNS stimulant; hallucinogen (tritium-labeled).*

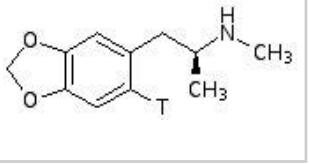


Catalog number : 7405-006

Name : (+)-[6'-^{3}H(n)]-3',4'-Methylenedioxymethamphetamine hydrochloride; (+)-[^{3}H]MDMA

Mol. formula : $C_{11}H_{16}ClNO_2$ **FW :** 231.71 **DEA schedule :** 1

Notes : *CNS stimulant; hallucinogen (tritium-labeled).*



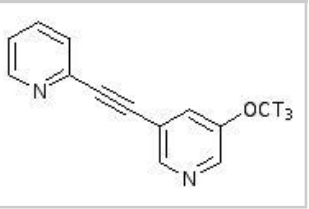
Miscellaneous: Glutamate Receptor Related

Catalog number : NOCD-058

Name : 3-[$^{3}H_3$]Methoxy-5-(pyridin-2-yl-ethynyl)pyridine

Mol. formula : $C_{13}H_{10}N_2O$ **FW :** 216.26 **DEA schedule :** 0

Notes : *Tritium-labeled MPEP analog*

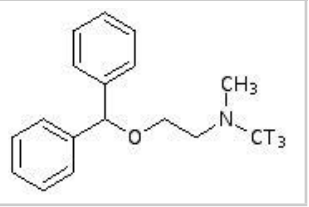


Miscellaneous: Histamine Receptor Related

Catalog number : NOCD-063

Name : [N-C$^{3}H_3$]Diphenhydramine

Mol. formula : $C_{17}H_{21}NO$ **FW :** 261.38 **DEA schedule :** 0

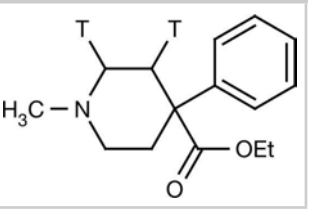


Opioids: Meperidine Class

Catalog number : 9230-003

Name : [2,3-$^{3}H_2$]Meperidine hydrochloride

Mol. formula : $C_{15}H_{22}ClNO_2$ **FW :** 287.81 **DEA schedule :** 2

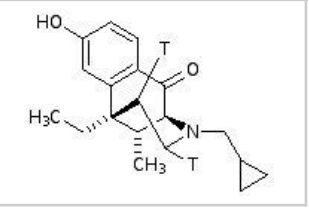


Opioids: Metazocine Class

Catalog number : 9240-003

Name : [11,12-$^{3}H_2$](-)-Ethylketazocine

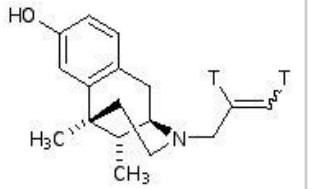
Mol. formula : $C_{19}H_{25}NO_2$ **FW :** 303.42 **DEA schedule :** 1



Catalog number : 9240-019

Name : (-)-[17,18-^{3}H]N-Allylnormetazocine

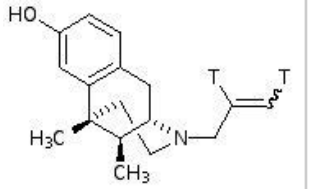
Mol. formula : $C_{17}H_{23}NO$ **FW :** 261.39 **DEA schedule :** 0



Catalog number : 9240-040

Name : (+)-[17,18-$^3H_2$]N-Allylnormetazocine

Mol. formula : $C_{17}H_{23}NO$ **FW :** 261.39 **DEA schedule :** 0

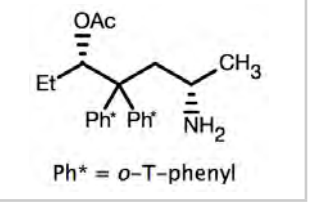


Opioids: Methadone Class

Catalog number : 9633-011

Name : (-)-[*o,o'* -$^3H_2$(n)]-α-Acetyl-N,N-dinormethadol hydrochloride

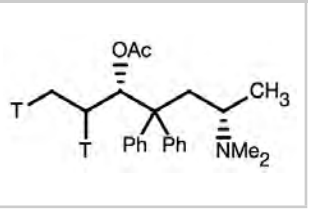
Mol. formula : $C_{21}H_{28}ClNO_2$ **FW :** 389.97 **DEA schedule :** 0



Catalog number : 9648-012

Name : (-)-[1,2-$^3H_2$]α-Acetylmethadol

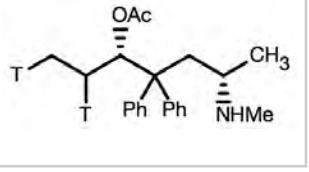
Mol. formula : $C_{23}H_{32}ClNO_2$ **FW :** 353.50 **DEA schedule :** 2



Catalog number : 9633-006

Name : (-)-[1,2-^{3}H]α-Acetylnormethadol hydrochloride

Mol. formula : $C_{23}H_{32}ClNO_2$ **FW :** 375.94 **DEA schedule :** 1

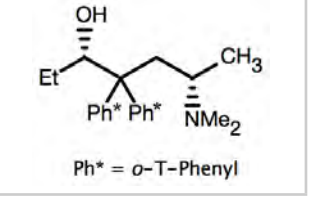


Catalog number : 9605-003

Name : (-)-[*o,o'* -$^3H_2$(n)]α-Methadol hydrochloride

Mol. formula : $C_{21}H_{29}NO$ **FW :** 347.93 **DEA schedule :** 1

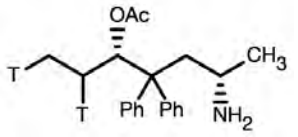
References : Portoghese, PS; Williams DA *J Med Chem* **1969**, *12*, 839-44.



Catalog number : 9633-015

Name : (-)-[1,2-$^3H_2$]α-Acetyl-N,N-dinormethadol hydrochloride

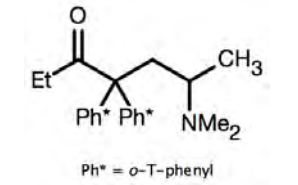
Mol. formula : $C_{21}H_{28}ClNO_2$ **FW :** 361.9-2 **DEA schedule :** 0



Catalog number : 9250-006

Name : (±)-[*o,o'*-$^3H_2$(n)]Methadone

Mol. formula : $C_{21}H_{27}NO$ **FW :** 313.46 **DEA schedule :** 2

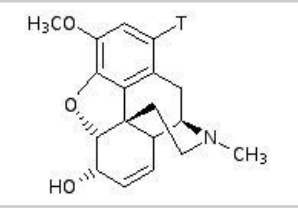


Opioids: Morphine Class

Catalog number : 9050-011

Name : [1-^{3}H]Codeine

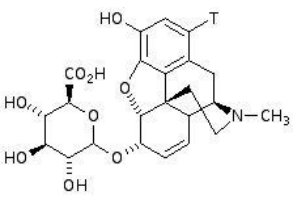
Mol. formula : $C_{18}H_{21}NO_3$ **FW :** 301.37 **DEA schedule :** 2



Catalog number : 9300-014

Name : [1-^{3}H]Morphine-6-glucuronide

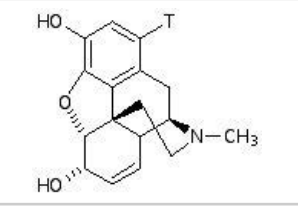
Mol. formula : $C_{23}H_{27}NO_9$ **FW :** 463.47 **DEA schedule :** 2



Catalog number : 9300-002

Name : Tritium-labeled Morphine sulfate

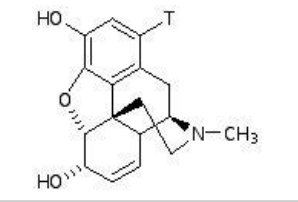
Mol. formula : $C_{17}H_{19}NO_3$ **FW :** 475.50 **DEA schedule :** 2



Catalog number : 9300-006 **CASRN :** 80573-75-7

Name : [1-^{3}H(n)]Morphine

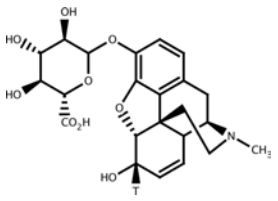
Mol. formula : $C_{17}H_{19}NO_3$ **FW :** 287.35 **DEA schedule :** 2



Catalog number : 9300-011

Name : Morphine-(6-^{3}H)-3-glucuronide

Mol. formula : $C_{23}H_{27}NO_9$ **FW :** 463.47 **DEA schedule :** 2



Opioids: Orvinol Class

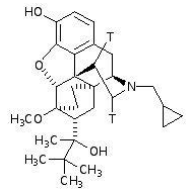
Catalog number : 9064-002 **CASRN :** 161772-95-8

Name : [15,16-$^{3}H_2$]Buprenorphine hydrochloride

Mol. formula : $C_{26}H_{38}ClNO_4$ **FW :** 508.11 **DEA schedule :** 5

Notes : *Narcotic analgesic (tritium-labeled).*

References : Robinson, SE *CNS Drug Rev* **2002**, *8*, 377-90.



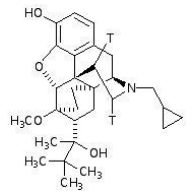
Catalog number : 9064-003 **CASRN :** 161772-95-8

Name : [15,16-$^{3}H_2$]Buprenorphine

Mol. formula : $C_{29}H_{41}NO_4$ **FW :** 508.11 **DEA schedule :** 3

Notes : *Narcotic analgesic (tritium-labeled).*

References : Robinson, SE *CNS Drug Rev* **2002**, *8*, 377-90.

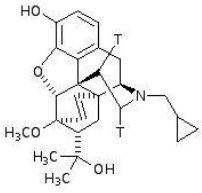


Catalog number : 9058-002

Name : [15,16-$^{3}H_2$]Diprenorphine

Mol. formula : $C_{26}H_{36}ClNO_4$ **FW :** 429.58 **DEA schedule :** 2

Notes : *(see footnotes 1 & 2 in Section C)*

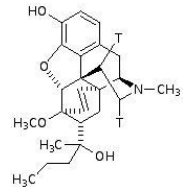


Catalog number : 9056-001

Name : [15,16-$^{3}H_2$]Etorphine

Mol. formula : $C_{25}H_{33}NO_4$ **FW :** 429.58 **DEA schedule :** 1

Notes : *(see footnotes 1 & 2 in Section C)*



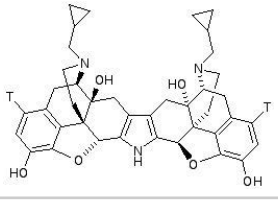
Opioids: Oxymorphone Class

Catalog number : NOCD-084

Name : [1,1'-^{3}H(n)]Norbinaltorphimine; [^{3}H]norBNI

Mol. formula : $C_{40}H_{43}N_3O_6$ **FW :** 665.80 **DEA schedule :** 0

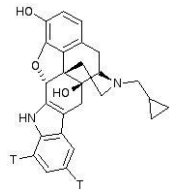
References : Birch, PJ; *et al. Eur J Pharmacol* **1987**, *144*, 405-8.
Portoghese, PS; Lipkowski, AW; Takemori, AE *Life Sci* **1987**, *40*, 1287-92.



Catalog number : 9652-061

Name : [5',7'-$^3H_2$]Naltrindole

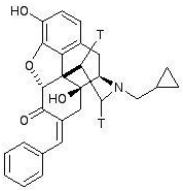
Mol. formula : $C_{26}H_{26}N_2O_3$ **FW :** 418.51 **DEA schedule :** 0



Catalog number : 9652-068

Name : [15,16-^{3}H]-7-Benzylidine-7-dehydronaltrexone; [^{3}H]BNTX

Mol. formula : $C_{27}H_{28}ClNO_4$ **FW :** 433.52 **DEA schedule :** 0

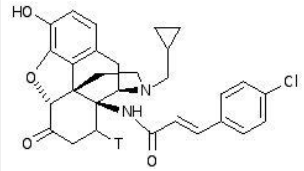


Catalog number : NOCD-079

Name : Tritium-labeled Clocinnamox

Mol. formula : $C_{29}H_{29}ClN_2O_4$ **FW :** 507.01 **DEA schedule :** 0

References : Comer, SD; Burke, TF; Lewis, JW; Woods, JH *J Pharmacol Exp Ther* **1992**, *262*, 1051-6.



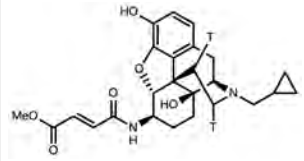
Catalog number : 9333-012

Name : [15,16-$^3H_2$]-6β-Funaltrexamine

Mol. formula : $C_{26}H_{33}ClN_2O_6$ **FW :** 458.53 **DEA schedule :** 2

Notes : *Irreversible μ-opioid receptor antagonist (tritium-labeled).*

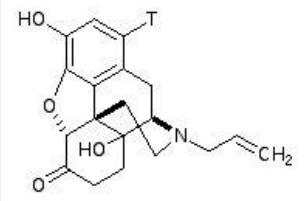
References : Portoghese, PS; el Kouhen, R; Law, PY; Loh, HH; Le Bourdonnec, B *Farmaco* **2001**, *56*, 191-6.



Catalog number : 9652-031

Name : (-)-[1-^{3}H(n)]Naloxone

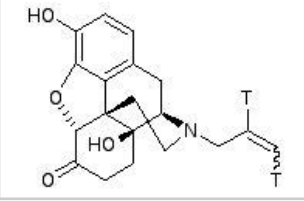
Mol. formula : $C_{19}H_{21}NO_4$ **FW :** 329.38 **DEA schedule :** 0



Catalog number : 9652-035

Name : (-)-[19,20-$^3H_2$]Naloxone

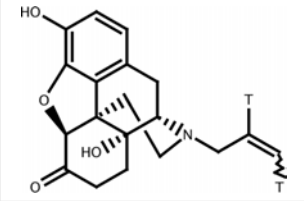
Mol. formula : $C_{19}H_{21}NO_4$ **FW :** 331.39 **DEA schedule :** 0



Catalog number : 9652-039

Name : (+)-[19,20-$^3H_2$]Naloxone

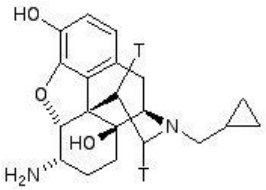
Mol. formula : $C_{19}H_{21}NO_4$ **FW :** 331.39 **DEA schedule :** 0



Catalog number : 9333-009

Name : [15,16-$^{3}H_2$]-6β-Naltrexamine

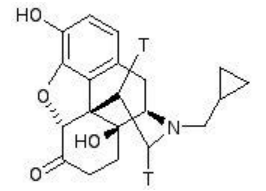
Mol. formula : $C_{20}H_{26}N_2O_3$ **FW :** 346.45 **DEA schedule :** 2



Catalog number : 9652-012

Name : [15,16-$^{3}H_2$]Naltrexone

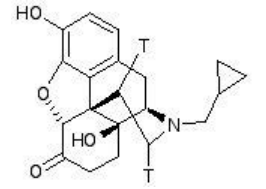
Mol. formula : $C_{20}H_{23}NO_4$ **FW :** 345.42 **DEA schedule :** 0



Catalog number : 9652-013

Name : [15,16-$^{3}H_2$]Naltrexone hydrochloride

Mol. formula : $C_{20}H_{24}ClNO_4$ **FW :** 381.88 **DEA schedule :** 0



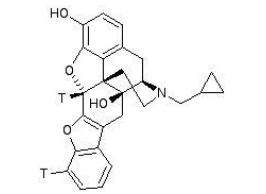
Catalog number : 9652-065

Name : Tritium-labeled Naltriben

Mol. formula : $C_{26}H_{25}NO_4$ **FW :** 419.50 **DEA schedule :** 0

Notes : *Selective δ-opioiod receptor antagonist (tritium-labeled).*

References : Sofuoglu, M; Portoghese, PS; Takemori, AE *J Pharmacol Exp Ther* **1991**, *257*, 676-80.



Opioids: Phenylpiperidine Class

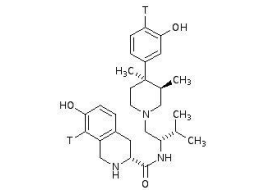
Catalog number : NOCD-059

Name : [^{3}H]JDTic

Mol. formula : $C_{28}H_{39}N_3O_3$ **FW :** 469.64 **DEA schedule :** 0

Notes : *Selective kappa-opioid antagonist (tritium-labeled).*

References : Thomas, JB; *et al.* J Med Chem **2001**, *44*, 2687-90.



Peptides: Cannabinoid-related

Catalog number : MPSP-096

Name : [$^{3}H_2$]Hemopressin

Mol. formula : $C_{53}H_{77}N_{13}O_{12}$ **FW :** 1092.3

Notes : *Radiolabeled hemopressin (MPSP-90; PEPT-053).*

H-Pro-Val-Asn-[3H]Phe-Lys-[3H]Phe-Leu-Ser-His-OH

Catalog number : MPSP-091

Name : [$^{3}H_{4}$]Hemopressin

Mol. formula : $C_{53}H_{77}N_{13}O_{12}$ **FW :** 1096.3

Notes : *Radiolabeled hemopressin (MPSP-90; PEPT-053).*

H-[3H2]Pro-Val-Asn-[3H]Phe-Lys-[3H]Phe-Leu-Ser-His-OH

Catalog number : MPSP-097

Name : [^{3}H]Leu^{6}-Hemopressin

Mol. formula : $C_{50}H_{79}N_{13}O_{12}$ **FW :** 1056.3

Notes : *Radiolabeled Leu^{6}-Hemopressin (PEPT-054).*

H-Pro-Val-Asn-[3H]Phe-Lys-Leu-Leu-Ser-His-OH

Catalog number : MPSP-093

Name : [$^{3}H_{2}$]Tyr^{7}-Hemopressin (1-6)

Mol. formula : $C_{47}H_{61}N_{9}O_{103}H_{2}$ **FW :** 918.1

Notes : *Radioligand for MPSP-092.*

H-Pro-Val-Asn-Phe-Lys-Phe-[3H2]Tyr-OH

Peptides: Opioid

Catalog number : MPSP-014

Name : [^{3}H]CTAP

Mol. formula : $C_{51}H_{68}N_{13}O_{11}S_{23}H$ **FW :** 1105.0

Notes : *Radioactive ligand for MPSP-013*

References : Abbruscato, TJ*; et al. J Pharmacol Exp Ther* **1997**, *280*, 402-9.

H-d-Phe[3H]-c[Cys-Tyr-d-Trp-Arg-Thr-Pen]-Thr-NH2

Catalog number : MPSP-007

Name : [$^{3}H_{2}$]DADLE

Mol. formula : $C_{29}H_{37}N_{5}O_{73}H_{2}$ **FW :** 573.7

Notes : *Tritiated DADLE*

References : Luciano, MG*; et al. Brain Res Bull* **1981**, *7*, 677-82.

H-Tyr[3H2]-d-Ala-Gly-Phe-d-Leu-OH

Catalog number : MPSP-035

Name : [$^{3}H_{2}$]DALCE

Mol. formula : $C_{33}H_{44}N_{6}O_{10}S_{3}H_{2}$ **FW :** 677.0

Notes : *Radioactive ligand for MPSP-034*

H-Tyr[3H2]-d-Ala-Gly-Phe-Leu-Cys-OH

Catalog number : MPSP-028

Name : [$^3H_2$]DALDA

Mol. formula : $C_{30}H_{43}N_9O_{53}H_2$ **FW :** 615.8

Notes : *Radioactive ligand for MPSP-027*

H-Tyr[3H2]-d-Arg-Phe-Lys-NH2

Catalog number : MPSP-012

Name : [$^3H_2$]DAMGO

Mol. formula : $C_{26}H_{33}N_5O_{63}H_2$ **FW :** 517.7

Notes : *Radioactive ligand for MPSP-011*

References : Zajac, JM; Roques BP *Life Sci* **1983**, *33 Suppl 1*, 155-8.

H-Tyr[3H2]-d-Ala-Gly-Nα-Me-Phe-Gly-ol

Catalog number : MPSP-031

Name : [$^3H_2$]Deltorphin I

Mol. formula : $C_{37}H_{50}N_8O_{103}H_2$ **FW :** 772.9

Notes : *Radioactive ligand for MPSP-030*

References : Erspamer, V; *et al. Proc Natl Acad Sci USA* **1989**, *86*, 5188.

H-Tyr[3H2]-d-Ala-Phe-Asp-Val-Val-Gly-NH2

Catalog number : MPSP-037

Name : [$^3H_2$]Deltorphin II

Mol. formula : $C_{38}H_{52}N_8O_{103}H_2$ **FW :** 786.9

Notes : *Radioactive ligand for MPSP-036*

References : Erspamer, V; *et al. Proc Natl Acad Sci USA* **1989**, *86*, 5188.

H-Tyr[3H2]-d-Ala-Phe-Glu-Val-Val-Gly-NH2

Catalog number : MPSP-002

Name : [$^3H_2$]DPDPE

Mol. formula : $C_{30}H_{37}N_7O_5S_{23}H_2$ **FW :** 649.8

Notes : *Radioactive ligand for MPSP-001*

References : Cotton, R*; et al. Eur J Pharmacol* **1984**, *97*, 331-2.

H-Tyr[3H2]-c[d-Pen-Gly-Phe-d-Pen]-OH

Catalog number : MPSP-045

Name : [$^3H_2$]*p*-Cl-Phe-DPDPE

Mol. formula : $C_{30}H_{36}ClN_5O_7S_{23}H_2$ **FW :** 684.4

Notes : *Radioactive ligand for MPSP-044*

H-Gly-Gly-Phe[3H]-Leu-Arg-Arg-Ile-Arg-Pro-Lys-Leu-Lys-Trp-Asp-Asn-Gln-OH

Catalog number : MPSP-004

Name : [$^3H_2$]DSLET

Mol. formula : $C_{33}H_{44}N_6O_{103}H_2$ **FW :** 690.9

Notes : *Radioactive ligand for MPSP-003*

References : David, M*; et al. Eur J Pharmacol* **1982**, *78*, 385-7.

H-Tyr[3H2]-d-Ser-Gly-Phe-Leu-Thr-OH

Catalog number : MPSP-033

Name : [$^3H_2$]DSTBULET

Mol. formula : $C_{33}H_{44}N_6O_{103}H_2$ **FW :** 746.9

Notes : *Radioactive ligand for MPSP-032*

References : Delay-Goyet, P *NIDA Res Mono* **1986**, *75*, 197-200.

H-Tyr[3H2]-d-Ser(But)-Gly-Phe-Leu-Thr-OH

Catalog number : MPSP-020

Name : [$^3H_2$]Dynorphin (1-11)

Mol. formula : $C_{63}H_{101}N_{21}O_{133}H_2$ **FW :** 1366.7

Notes : *Radioactive ligand for MPSP-019*

References : Chavkin, C; Goldstein, A *Proc Natl Acad Sci USA* **1981**, *78*, 6543-7.

H-Tyr[3H2]-Gly-Gly-Phe-Leu-Arg-Arg-Ile-Arg-Pro-Lys-OH

Catalog number : MPSP-018

Name : [$^3H_2$]Dynorphin (1-13) amide

Mol. formula : $C_{75}H_{125}N_{25}O_{143}H_2$ **FW :** 1607.2

Notes : *Radioactive ligand for MPSP-017*

H-Tyr[3H2]-Gly-Gly-Phe-Leu-Arg-Arg-Ile-Arg-Pro-Lys-Leu-Lys-NH2

Catalog number : MPSP-022

Name : [$^3H_2$]Dynorphin (1-9)

Mol. formula : $C_{52}H_{82}N_{18}O_{113}H_2$ **FW :** 1141.5

Notes : *Radioactive ligand for MPSP-021*

References : Robson, LE*; et al. Life Sci* **1983**, *33 Suppl 1*, 283-6.
Wood, MS; Rodriguez FD; Traynor JR *Neuropharmacology* **1989**, *28*, 1041-6.

H-Tyr[3H2]-Gly-Gly-Phe-Leu-Arg-Arg-Ile-Arg-OH

Catalog number : MPSP-041

Name : [^3H]Dynorphin (2-17)

Mol. formula : $C_{90}H_{155}N_{30}O_{213}H$ **FW :** 1986.8

Notes : *Radioactive ligand for MPSP-040*

H-Gly-Gly-Phe[3H]-Leu-Arg-Arg-Ile-Arg-Pro-Lys-Leu-Lys-Trp-Asp-Asn-Gln-OH

Catalog number : MPSP-074

Name : [$^3H_2$]Endomorphin-2

Mol. formula : $C_{32}H_{35}N_5O_{53}H_2$ **FW :** 575.7

Notes : *Radioactive ligand for MPSP-073*

References : Spetea, M*; et al. Biochem Biophys Res Commun* **1998**, *250*, 720-5.

H-Tyr[3H2]-Pro-Phe-Phe-NH2

Catalog number : MPSP-025

Name : [$^3H_2$]β-Endorphin

Mol. formula : $C_{158}H_{249}N_{39}O_{46}S_3H_2$ **FW :** 3469.6

Notes : *Radioactive ligand for MPSP-024*

References : Li, CH; *et al. Proc Natl Acad Sci USA* **1980**, *77*, 2303-4.

H-Tyr-Gly-Gly-Phe-Met-Thr-Ser-Glu-Lys-Ser-Gln-Thr-Pro-Leu-Val-Thr-Leu-Phe-Lys-Asn-Ala-Ile-Ile-Lys-Asn-Ala-[3H2]Tyr-Lys-Lys-Gly-Glu-OH

Catalog number : MPSP-081

Name : [$^{3}H_{2}$]Leu-Enkephalin-acid

Mol. formula : $C_{28}H_{37}N_{5}O_{7}$ **FW :** 559.3

Notes : *Radioactive ligand for MPSP-080.*

H-[3H2]Tyr-Gly-Gly-Phe-Leu-OH

Catalog number : MPSP-079

Name : [$^{3}H_{2}$]Kaffiralin-1

Mol. formula : $C_{30}H_{42}N_{8}O_{43}H_{2}$ **FW :** 584.7

Notes : *Radioactive ligand for MPSP-076*

References : Dooley, CT*; et al. J Biol Chem* **1998**, *273*, 18848-56.

H-[3H]d-Phe-[3H]d-Phe-d-Ile-d-Arg-NH2

Catalog number : MPSP-077

Name : [$^{3}H_{2}$]Kaffiralin-2

Mol. formula : $C_{30}H_{42}N_{8}O_{43}H_{2}$ **FW :** 584.7

Notes : *Radioactive ligand for MPSP-076.*

H-[3H]d-Phe-[3H]d-Phe-d-Nle-d-Arg-NH2

Catalog number : MPSP-059

Name : [$^{3}H_{2}$]Orphanin FQ; [$^{3}H_{2}$]Nociceptin

Mol. formula : $C_{79}H_{127}N_{27}O_{223}H_{2}$ **FW :** 1813.4

Notes : *Radioactive ligand for MPSP-058*

References : Dooley, CT; Houghten RA *Life Sci* **1996**, *59*, PL23-9.

H-Phe[3H]-Gly-Gly-Phe[3H]-Thr-Gly-Ala-Arg-Lys-Ser-Ala-Arg-Lys-Leu-Ala-Asn-Gln-OH

Catalog number : MPSP-082

Name : [$^{3}H_{4}$]Tyr^{14}Orphanin FQ

Mol. formula : $C_{82}H_{123}N_{27}O_{233}H_{4}$ **FW :** 1867.1

Notes : *Radioactive ligand for MPSP-058*

References : Dooley, CT; *et al. Life Science* **1996**, *59*, PL23-PL29.

H-Phe[3H]-Gly-Gly-Phe[3H]-Thr-Gly-Ala-Arg-Lys-Ser-Ala-Arg-Lys-Tyr[3H2]-Ala-Asn-Gln-OH

Catalog number : MPSP-095

Name : [$^{3}H_{4}$]Orphanin FQ

Mol. formula : $C_{79}H_{125}N_{27}O_{223}H_{4}$ **FW :** 1817.4

Notes : *Radioactive ligand for MPSP-058.*

H-[3H]Phe-Gly-Gly-[3H]Phe-Thr-Gly-Ala-Arg-Lys-Ser-Ala-Arg-Lys-[3H2]Leu-Ala-Asn-Gln-OH

Catalog number : MPSP-010

Name : [$^{3}H_{2}$]PLO17

Mol. formula : $C_{29}H_{35}N_{5}O_{53}H_{2}$ **FW :** 539.6

Notes : *Radioactive ligand for MPSP-009.*

References : Hawkins, KN*; et al. Eur J Pharmacol* **1987**, *133*, 351-2.

H-Tyr[3H2]-Pro-Nα-Me-Phe-d-Pro-NH2

Catalog number : MPSP-039

Name : [$^{3}H_2$]Tipp-Enkephalin

Mol. formula : $C_{37}H_{36}N_4O_{63}H_2$ **FW :** 638.8

Notes : *Radioactive ligand for MPSP-038*

References : Nevin, ST*; et al. Life Sci* **1993**, *53*, PL57-62.

H-Tyr[3H2]-Tic-Phe-Phe-OH

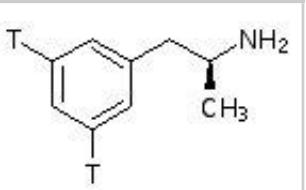
Stimulants: Amphetamine Class

Catalog number : 1100-009

Name : (+)-(*S*)-[3,5-^{3}H(n)]Amphetamine

Mol. formula : $C_9H_{13}N$ **FW :** 139.22 **DEA schedule :** 2

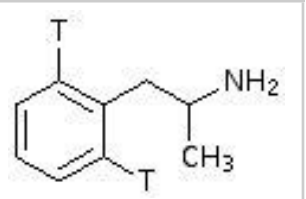
Notes : *CNS stimulant (tritium-labeled).*



Catalog number : 1100-005

Name : (±)-[2',6'-$^{3}H_2$]Amphetamine; 2,6-Tritioamphetamine

Mol. formula : $C_9H_{13}N$ **FW :** 135.21 **DEA schedule :** 2



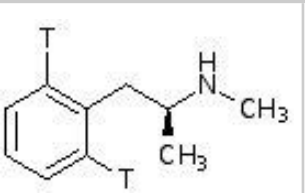
Stimulants: Methamphetamine Class

Catalog number : 1105-004

Name : (+)-[2',6'-^{3}H(n)Methamphetamine hydrochloride

Mol. formula : $C_{10}H_{16}ClN$ **FW :** 185.69 **DEA schedule :** 2

Notes : *CNS stimulant (tritium-labeled).*

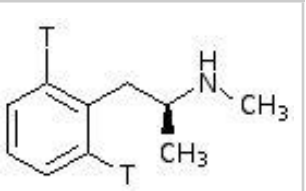


Catalog number : 1105-008

Name : (+)-[2,6-^{3}H(n)]Methamphetamine

Mol. formula : $C_{10}H_{15}N$ **FW :** 153.25 **DEA schedule :** 2

Notes : *CNS stimulant (tritium-labeled).*

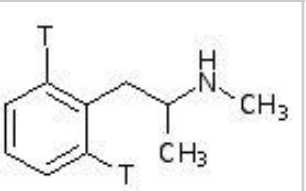


Catalog number : 1105-006

Name : (±)-[2',6'-^{3}H(n)]Methamphetamine hydrochloride

Mol. formula : $C_{10}H_{16}ClN$ **FW :** 189.71 **DEA schedule :** 2

Notes : *CNS stimulant (tritium-labeled).*

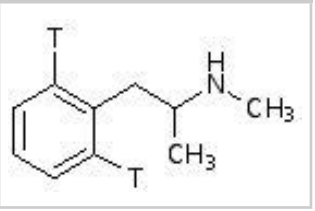


Catalog number : 1105-007

Name : (±)-[2,6-^{3}H(n)]Methamphetamine

Mol. formula : $C_{10}H_{15}N$ **FW :** 153.25 **DEA schedule :** 2

Notes : *CNS stimulant (tritium-labeled).*

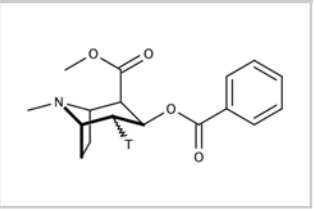


Stimulants: Tropane Class

Catalog number : 9041-004 **CASRN :** 85438-94-4

Name : (-)-[4-^{3}H]Cocaine

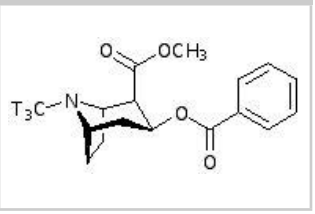
Mol. formula : $C_{17}H_{21}NO_4$ **FW :** 303.35 **DEA schedule :** 2



Catalog number : 9041-003

Name : (-)-[N-C^{3}H$_3$]Cocaine

Mol. formula : $C_{17}H_{21}NO_4$ **FW :** 309.38 **DEA schedule :** 2



NIH
National Institute
on Drug Abuse

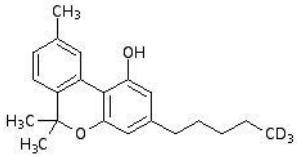
Cannabinoids: Tetrahydrocannabinol Class

Catalog number : 7360-014

Name : [5'-$^{2}H_{3}$]Cannabinol

Mol. formula : $C_{21}H_{26}O_{2}$ **FW :** 310.43 **DEA schedule :** 1

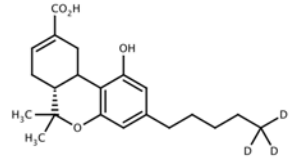
Notes : *Inactive constituent of cannabis (deuterium-labeled).*



Catalog number : 7370-038

Name : [5'-$^{2}H_{3}$]-11-*nor*-Δ^{8}-THC-9-carboxylic acid

Mol. formula : $C_{21}H_{28}O_{4}$ **FW :** 347.46 **DEA schedule :** 1

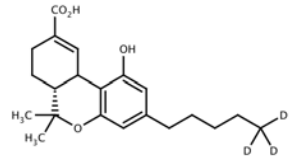


Catalog number : 7370-003 **CASRN :** 113269-48-0

Name : [5'-$^{2}H_{3}$]9-Carboxy-11-*nor*-Δ^{9}-THC

Mol. formula : $C_{21}H_{28}O_{4}$ **FW :** 347.46 **DEA schedule :** 1

Notes : *Urinary metabolite of THC (deuterium-labeled).*

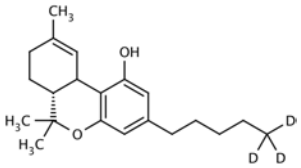


Catalog number : 7370-005 **CASRN :** 81586-39-2

Name : Deuterium-labeled Δ^{9}-THC

Mol. formula : $C_{21}H_{30}O_{2}$ **FW :** 317 **DEA schedule :** 1

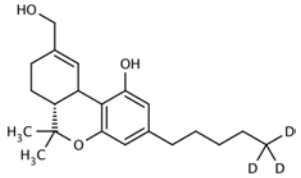
Notes : *Hallucinogen; psychotropic; analgesic (deuterium-labeled).*



Catalog number : 7370-010 **CASRN :** 130410-26-3

Name : [5'-$^{2}H_{3}$]-11-Hydroxy-Δ^{9}-THC

Mol. formula : $C_{21}H_{30}O_{3}$ **FW :** 333 **DEA schedule :** 1

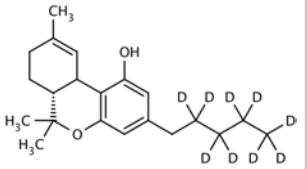


Catalog number : 7370-025

Name : [2',2',3',3',4',4',5',5',5'-$^{2}H_{9}$]Δ^{9}-THC

Mol. formula : $C_{21}H_{30}O_{2}$ **FW :** 323.52 **DEA schedule :** 1

Notes : *Hallucinogen; psychotropic; analgesic (deuterium-labeled).*

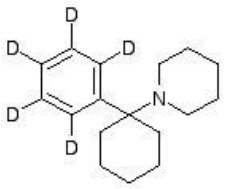


Dissociatives: Phencyclidine Class

Catalog number : 7471-003

Name : [Phenyl-2,3,4,5,6-$^{2}H_{5}$]Phencyclidine; [Phenyl-2,3,4,5,6-$^{2}H_{5}$]PCP

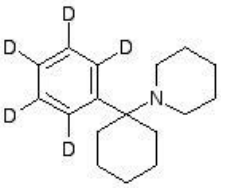
Mol. formula : $C_{17}H_{25}N$ **FW :** 248.42 **DEA schedule :** 2



Catalog number : 7471-006

Name : [Phenyl-$^{2}H_{5}$]Phencyclidine hydrochloride; [Phenyl-$^{2}H_{5}$]PCP HCl

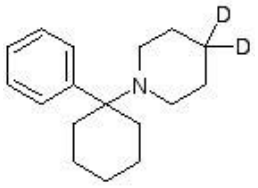
Mol. formula : $C_{17}H_{26}ClN$ **FW :** 284.89 **DEA schedule :** 2



Catalog number : 7471-008

Name : [Piperidino-4,4-$^{2}H_{2}$]Phencyclidine hydrochloride; [Piperidino-4,4-$^{2}H_{2}$]PCP

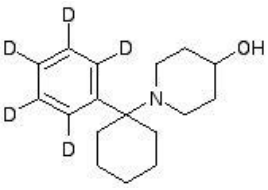
Mol. formula : $C_{17}H_{26}ClN$ **FW :** 281.86 **DEA schedule :** 2



Catalog number : 7471-082

Name : [Phenyl-$^{2}H_{5}$]-1-(1-Phenylcyclohexyl)-4-hydroxypiperidine

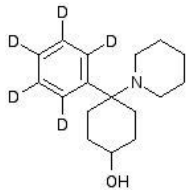
Mol. formula : $C_{17}H_{25}NO$ **FW :** 264.43 **DEA schedule :** 1



Catalog number : 7471-084

Name : [Phenyl-$^{2}H_{5}$]-1-(1-Phenyl-4-hydroxycyclohexyl)piperidine (*cis*/*trans*)

Mol. formula : $C_{17}H_{25}NO$ **FW :** 264.43 **DEA schedule :** 1

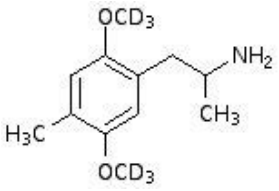


Hallucinogens: Amphetamine Class

Catalog number : 7395-004

Name : [OC^2H_3]-2,5-Dimethoxy-4-methylamphetamine HCl; [OC^2H_3]DOM

Mol. formula : $C_{12}H_{20}ClNO_2$ **FW :** 251.78 **DEA schedule :** 1

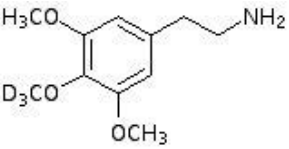


Hallucinogens: Phenethylamine Class

Catalog number : 7381-002

Name : [4'-OC^2H_3]Mescaline hydrochloride

Mol. formula : $C_{11}H_{18}ClNO_3$ **FW :** 247.72 **DEA schedule :** 1



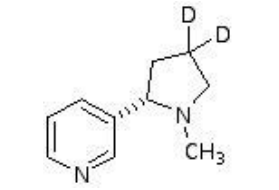
Nicotinics: Nicotine Class

Catalog number : NICT-015 **CASRN :** 121949-85-7

Name : (-)-Nicotine-4,4-d_2 (-)-*di*-*p*-toluoyl-L-tartrate

Mol. formula : $C_{30}H_{32}N_2O_8$ **FW :** 550.60 **DEA schedule :** 0

References : Jacob, PJ *Labelled Comp Radiopharm* **1988**, *25*, 1117-28.



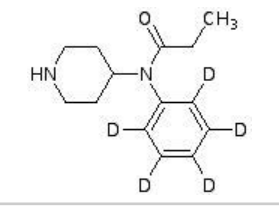
Opioids: Fentanyl Class

Catalog number : 9801-008 **CASRN :** 1211527-23-9

Name : [Phenyl-$^2H_5$]N-4-Piperidyl-N-phenylpropanamide

Mol. formula : $C_{14}H_{20}N_2O$ **FW :** 237.36 **DEA schedule :** 2

Notes : *Precursor for the synthesis of mass-labeled fentanyl analogs.*

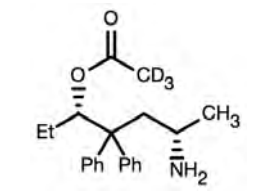


Opioids: Methadone Class

Catalog number : 9633-012

Name : (-)-[Acetyl-$^2H_3$]α-Acetyl-N,N-dinormethadol hydrochloride

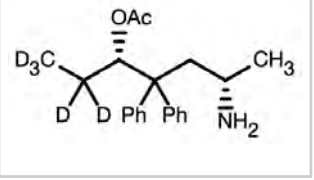
Mol. formula : $C_{21}H_{28}ClNO_2$ **FW :** 361.92 **DEA schedule :** 0



Catalog number : 9633-014

Name : (-)-[1,1,1,2,2,3-$^{2}H_{6}$]α-Acetyl-N,N-dinormethadol hydrochloride

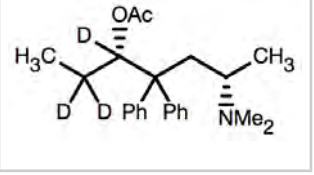
Mol. formula : $C_{21}H_{28}ClNO_2$ **FW :** 361.92 **DEA schedule :** 0



Catalog number : 9648-016

Name : (-)-[2,2,3-$^{2}H_{3}$]α-Acetylmethadol hydrochloride

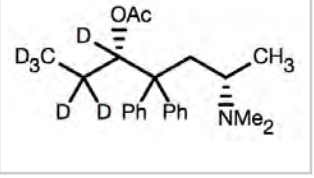
Mol. formula : $C_{23}H_{32}ClNO_2$ **FW :** 353.50 **DEA schedule :** 2



Catalog number : 9648-010

Name : (-)-[1,1,1,2,2,3-$^{2}H_{6}$]α-Acetylmethadol hydrochloride

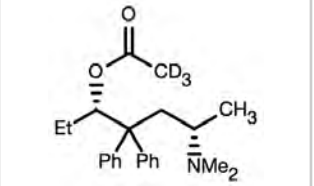
Mol. formula : $C_{24}H_{34}ClNO$ **FW :** 389.97 **DEA schedule :** 2



Catalog number : 9648-011

Name : (-)-[Acetyl-$^{2}H_{3}$]α-acetylmethadol hydrochloride

Mol. formula : $C_{21}H_{28}ClNO_2$ **FW :** 389.97 **DEA schedule :** 2

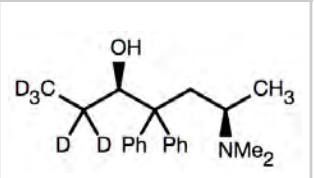


Catalog number : 9605-010

Name : [1,1,1,2,2-$^{2}H_{5}$]α-Methadol hydrochloride

Mol. formula : $C_{21}H_{30}ClNO$ **FW :** 347.93 **DEA schedule :** 1

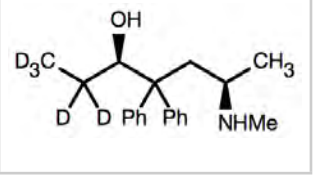
References : Portoghese, PS; Williams DA *J Med Chem* **1969**, *12*, 839-44.



Catalog number : 9605-021

Name : [1,1,1,2,2-$^{2}H_{5}$]α-Normethadol perchlorate

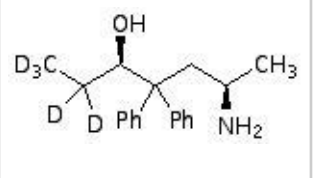
Mol. formula : $C_{20}H_{28}ClNO_5$ **FW :** 397.90 **DEA schedule :** 1



Catalog number : 9605-031

Name : [1,1,1,2,2-$^{2}H_{5}$]α-N,N-Dinormethadol maleate

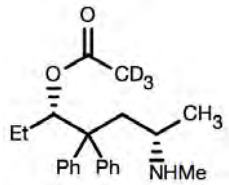
Mol. formula : $C_{19}H_{25}NO$ **FW :** 399.49 **DEA schedule :** 1



Catalog number : 9633-003

Name : (-)-[Acetyl-$^{2}H_3$]α-Acetylnormethadol hydrochloride

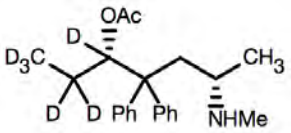
Mol. formula : $C_{22}H_{30}ClNO_2$ **FW :** 375.94 **DEA schedule :** 1



Catalog number : 9633-004

Name : (-)-[1,1,1,2,2,3-$^{2}H_6$]α-Acetylnormethadol hydrochloride

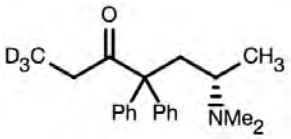
Mol. formula : $C_{23}H_{22}ClNO_2$ **FW :** 375.94 **DEA schedule :** 1



Catalog number : 9250-011

Name : (+)-[1,1,1-$^{2}H_3$]Methadone hydrochloride

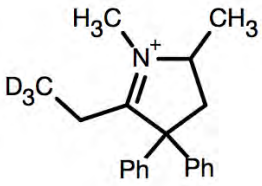
Mol. formula : $C_{21}H_{28}ClNO$ **FW :** 348.92 **DEA schedule :** 2



Catalog number : 9250-027

Name : [Ethyl-2',2',2'-$^{2}H_3$]-1,5-Dimethyl-3,3-diphenyl-2-ethylpyrrolinium perchlorate

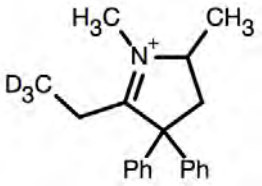
Mol. formula : $C_{20}H_{25}ClNO_4$ **FW :** 384.91 **DEA schedule :** 0



Catalog number : 9250-032

Name : [Ethyl-2',2',2'-$^{2}H_3$]-3,3-Diphenyl-2-ethyl-5-methyl-1-pyrroline hydrochloride

Mol. formula : $C_{20}H_{25}ClN$ **FW :** 302.86 **DEA schedule :** 0

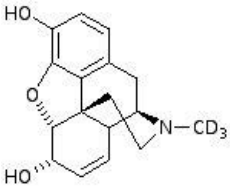


Opioids: Morphine Class

Catalog number : 9300-005 **CASRN :** 67293-88-3

Name : [N-$C^{2}H_3$]Morphine

Mol. formula : $C_{17}H_{19}NO_3$ **FW :** 288.36 **DEA schedule :** 2

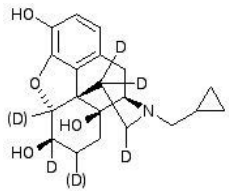


Opioids: Oxymorphone Class

Catalog number : 9652-057

Name : [5,6,7,15,15,15,16-$^2H_6$]-6α-Naltrexol

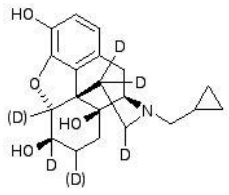
Mol. formula : $C_{20}H_{25}NO_4$ **FW :** 349.45 **DEA schedule :** 0



Catalog number : 9652-052

Name : [5,6,7,15,15,15,16-$^2H_6$]-6β-Naltrexol hydrochloride

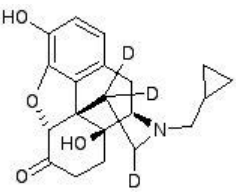
Mol. formula : $C_{20}H_{26}ClNO_4$ **FW :** 385.91 **DEA schedule :** 0



Catalog number : 9652-014

Name : [15,15,16-$^2H_3$]Naltrexone

Mol. formula : $C_{20}H_{23}NO_4$ **FW :** 344.42 **DEA schedule :** 0

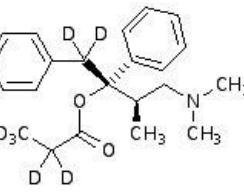


Opioids: Propoxyphene Class

Catalog number : 9273-004

Name : [$^2H_7$]Propoxyphene hydrochloride

Mol. formula : $C_{22}H_{29}NO_2$ **FW :** 346.51 **DEA schedule :** 2

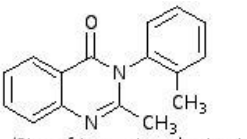


Sedatives: Methaqualone Class

Catalog number : 2565-001 **CASRN :** 72-44-6

Name : [$^2H_4$]Methaqualone

Mol. formula : $C_{16}H_{14}N_2O$ **FW :** 254.32 **DEA schedule :** 1



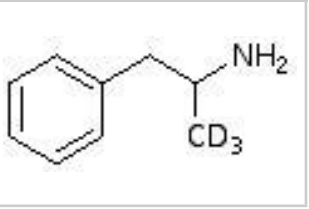
(Site of isotopic substitution is unknown.)

Stimulants: Amphetamine Class

Catalog number : 1100-004 **CASRN :** 38875-35-3

Name : (±)-[1,1,1-$^{2}H_3$]Amphetamine sulfate

Mol. formula : $C_9H_{13}N$ **FW :** 374.53 **DEA schedule :** 2



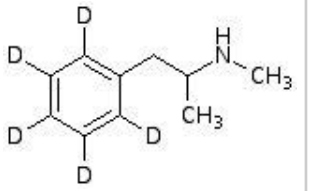
References : Cho, AK; *et al.* ., *Anal Chem* **1973**, *45*, 570-4.
Valtier, S; Cody, JT *J Anal Toxicol* **1995**, *19*, 375-80.

Stimulants: Methamphetamine Class

Catalog number : 1105-002

Name : (±)-[2',3',4',5',6'-$^{2}H_5$]Methamphetamine hydrochloride

Mol. formula : $C_{10}H_{16}ClN$ **FW :** 190.72 **DEA schedule :** 2

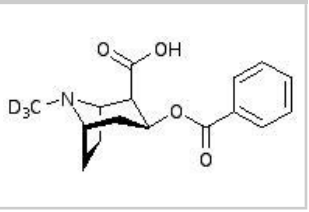


Stimulants: Tropane Class

Catalog number : 9180-003

Name : (-)-[N-$C^{2}H_3$]Benzoylecgonine

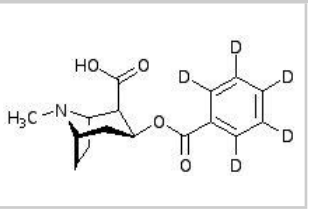
Mol. formula : $C_{16}H_{19}NO_4$ **FW :** 292.34 **DEA schedule :** 2



Catalog number : 9180-011

Name : (-)-[Phenyl-$^{2}H_5$]Benzoylecgonine

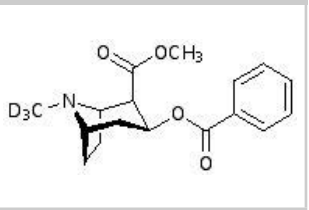
Mol. formula : $C_{16}H_{19}NO_4$ **FW :** 294.36 **DEA schedule :** 2



Catalog number : 9041-006

Name : (-)-[N-$C^{2}H_3$]Cocaine

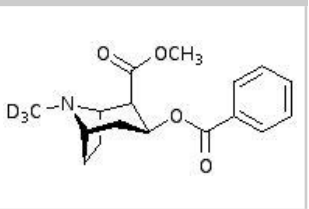
Mol. formula : $C_{17}H_{21}NO_4$ **FW :** 306.37 **DEA schedule :** 2



Catalog number : 9041-007

Name : (-)-[N-$C^{2}H_3$]Cocaine hydrochloride

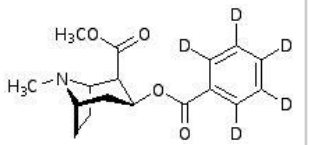
Mol. formula : $C_{17}H_{22}ClNO_4$ **FW :** 342.83 **DEA schedule :** 2



Catalog number : 9041-009

Name : (-)-[Phenyl-$^{2}H_5$]Cocaine

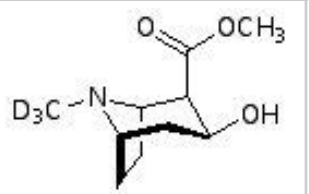
Mol. formula : $C_{17}H_{21}NO_4$ **FW :** 344.84 **DEA schedule :** 2



Catalog number : 9180-007

Name : [N-$C^{2}H_3$]Ecgonine methyl ester hydrochloride

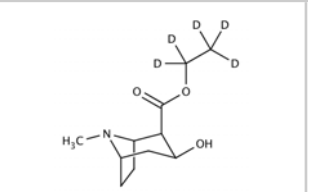
Mol. formula : $C_{10}H_{18}ClNO_3$ **FW :** 238.73 **DEA schedule :** 2



Catalog number : 9180-021 **CASRN :** 259526-73-3

Name : Ecgonine (1,1,2,2,2-$^{2}H_5$)ethyl ester perchlorate

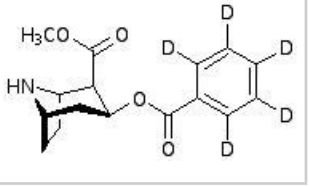
Mol. formula : $C_{11}H_{14}D_5NO_3 \bullet HClO_4$ **FW :** 318.76 **DEA schedule :** 2



Catalog number : 9041-017

Name : (-)-[Phenyl-$^{2}H_5$]Norcocaine fumarate

Mol. formula : $C_{20}H_{23}NO_8$ **FW :** 410.43 **DEA schedule :** 2

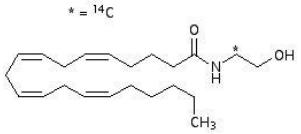


Cannabinoids: Fatty Acid Derivatives (Anandamides)

Catalog number : NOCD-007

Name : Arachidonyl[1-^{14}C]ethanolamide

Mol. formula : $C_{23}H_{37}NO_2$ **FW :** 361.56 **DEA schedule :** 0



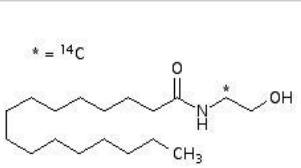
Cannabinoids: Fatty Acid Derivatives (Palmitoyl amides)

Catalog number : NOCD-005

Name : Palmitoyl[1-^{14}C]ethanolamide

Mol. formula : $C_{18}H_{37}NO_2$ **FW :** 299.49 **DEA schedule :** 0

Notes : *Cannabinoid CB2 receptor agonist (carbon-labeled).*



Cannabinoids: Precursors, Biosynthetic

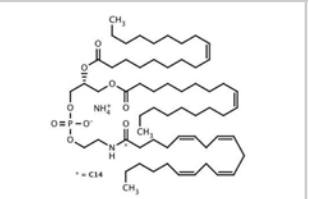
Catalog number : NOCD-009

Name : N-[1-^{14}C]-Arachidonyl-1,2-dioleoyl-*sn*-glycero-3-phosphoethanolamine ammonium salt

Mol. formula : $C_{61}H_{111}N_2O_9P$ **FW :** 1047.52 **DEA schedule :** 0

Notes : *Putative biosynthetic precursor of endogenous cannabinoids (carbon-labeled).*

References : Morishita, J; *et al. J Neurochem* **2005**, *94*, 753-62.



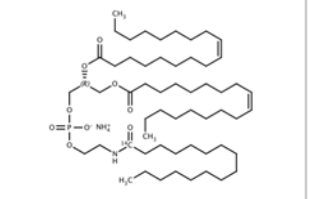
Catalog number : NOCD-000

Name : N-[1-^{14}C]-Palmitoyl-1,2-dioleoyl-*sn*-glycero-3-phosphoethanolamine ammonium salt

Mol. formula : $C_{57}H_{111}N_2O_9P$ **FW :** 999.47 **DEA schedule :** 0

Notes : *Putative biosynthetic precursor of endogenous cannabinoids (carbon-labeled).*

References : Morishita J; *et al. J Neurochem* **2005**, *94*, 753-62.



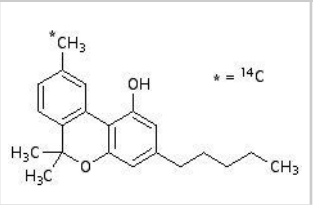
Cannabinoids: Tetrahydrocannabinol Class

Catalog number : 7360-015

Name : [11-^{14}C]Cannabinol

Mol. formula : $C_{2014}CH_{26}O_2$ **FW :** 310.43 **DEA schedule :** 1

Notes : *Inactive constituent of cannabis (carbon-labeled).*

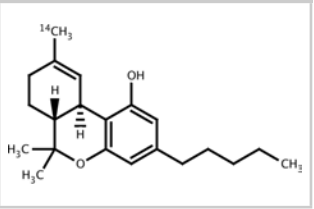


Catalog number : 7370-033

Name : [11-^{14}C]Δ^9-THC

Mol. formula : $C_{21}H_{30}O_2$ **FW :** 316.45 **DEA schedule :** 1

Notes : *Hallucinogen; psychotropic; analgesic (carbon-labeled).*

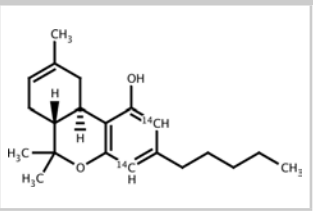


Catalog number : 7370-032

Name : [2,4-^{14}C]Δ^8-THC

Mol. formula : $C_{21}H_{30}O_2$ **FW :** 318.45 **DEA schedule :** 1

Notes : *Hallucinogen; psychotropic; analgesic (carbon-labeled).*

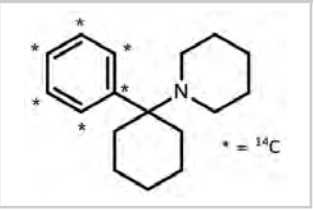


Dissociatives: Phencyclidine Class

Catalog number : 7471-002

Name : [^{14}C]Phencyclidine HBr; [^{14}C]PCP

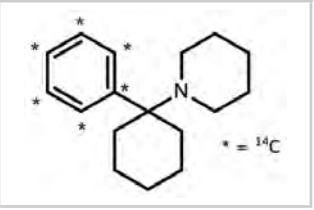
Mol. formula : $C_{18}H_{28}BrN$ **FW :** 523.53 **DEA schedule :** 2



Catalog number : 7471-007

Name : [Phenyl-U-^{14}C]-1-(1-Phenylcyclohexyl)Piperidine; [Phenyl-U-^{14}C]PCP

Mol. formula : $C_{17}H_{25}N$ **FW :** 245.39 **DEA schedule :** 2

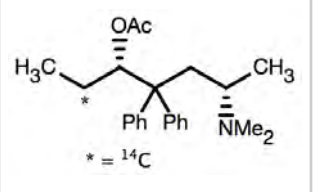


Opioids: Methadone Class

Catalog number : 9648-013

Name : (-)-[2-^{14}C]-α-Acetylmethadol hydrochloride

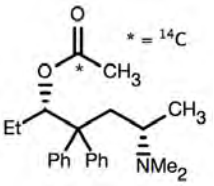
Mol. formula : $C_{23}H_{32}ClNO_2$ **FW :** 353.50 **DEA schedule :** 2



Catalog number : 9648-014

Name : (-)-[Acetyl-^{14}C]-α-Acetylmethadol

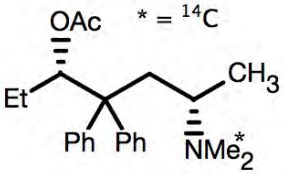
Mol. formula : $C_{23}H_{32}ClNO_2$ **FW :** 353.50 **DEA schedule :** 2



Catalog number : 9648-015

Name : (-)-[N-^{14}CH$_3$]-α-Acetylmethadol hydrochloride

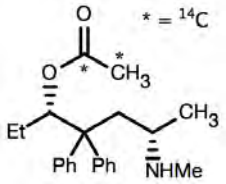
Mol. formula : $C_{23}H_{31}NO_2$ **FW :** 353.50 **DEA schedule :** 2



Catalog number : 9633-005

Name : (-)-[Acetyl-^{14}C$_2$]-α-Acetylnormethadol hydrochloride

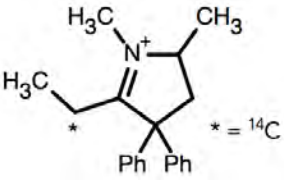
Mol. formula : $C_{22}H_{30}ClNO_2$ **FW :** 375.94 **DEA schedule :** 1



Catalog number : 9250-026

Name : [1'-^{14}C]-2-Ethyl-1,5-dimethyl-3,3-diphenylpyrrolinium perchlorate

Mol. formula : $C_{20}H_{25}ClNO_4$ **FW :** 536.01 **DEA schedule :** 0



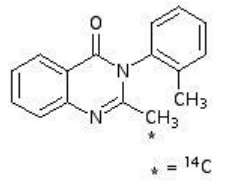
Sedatives: Methaqualone Class

Catalog number : 2565-002 **CASRN :** 72-44-6

Name : [2-^{14}C]Methaqualone

Mol. formula : $C_{16}H_{14}N_2O$ **FW :** 251.30 **DEA schedule :** 1

Notes : *Sedative; hypnotic (carbon-labeled).*



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Peptides: Opioid

Catalog number : MPSP-026

Name : [^{125}I]β-Endorphin

Mol. formula : $C_{158}H_{249}N_{39}O_{46}S_{125}I_2$ **FW :** 3589.6

Notes : *Radioactive ligand for MPSP-024*

References : *Deby-Dupont, G; et al. C R Seances Soc Biol Fil* ***1983****, 177, 259-68.*
Schweigerer, L; et al. J Biol Chem ***1983****, 258, 12287-92.*

H-
YGGFMTSEKSQTPLVTLFKNAI
IKNAYKY[125I2]GE-OH

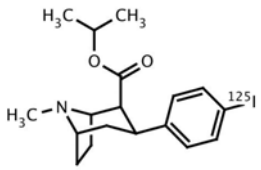
Stimulants: Tropane Class

Catalog number : NOCD-077

Name : [^{125}I]RTI-121

Mol. formula : $C_{18}H_{24}INO_2$ **FW :** 413.29 **DEA schedule :** 0

References : Scheffel, U; *et al. Neuroreport* **1992**, *3*, 969-72.
Carroll, FI*; et al. J Med Chem* **1995**, *38*, 379-88.



NIH
National Institute
on Drug Abuse

Limited quantities of Nicotine Research Cigarettes (NRC)s manufactured under the NIDA DSP are available to research investigators under specified parameters such as nicotine and tar yields ,and type as reduced nicotine (RN), reduced nicotine and menthol (RN-Men), reduced nicotine and high tar (RN-HT), reduced nicotine, high tar and menthol (RN-HT-Men), and conventional nicotine (CN). The NIDA DSP will consider requests for its current inventory of NRCs from researcher investigators funded through the NIH to conduct tobacco science research.

To facilitate planning for either usage of the current inventory of NRCs, or future manufacturing needs, the NIDA DSP requests that research investigators who intend to submit requests for NRCs from the NIDA DSP send an email request with the following information: 1) anticipated total quantity (carton) of each type of NRC needed with their Tobacco Product Master File (TPMF) codes and Type, 2) the requested timeline and amounts for initial receipt, and 3) requested timeline of replenishment of each type of NRC. For those research investigators who have NIDA/NIH grants, they can submit their request according to the NIDA DSP Guidelines for Research Chemicals, Controlled Substances, and Nicotine Research Cigarettes (NRC). For more information, please email NIDANRCSupply@mail.nih.gov

Characteristics of the NRC inventory are described in the following table:

Nicotine Research Cigarettes (RTI)								
TPMF Code	**Type**	**Filter PD (mm H_2O)**	**Filter Type (Mono/Dual)**	**Filter Type (Regular/ Menthol)**	**Tipping Paper Perforation**	**Nicotine Content (mg/g tobacco)**	**Specifications Nicotine Yield**	**Specifications Tar Yield**
NRC100	RN-HV	81	Dual	Regular	800CU	0.47 ± 0.02	0.02 ± 0.01	3.0 ± 1.5
NRC101	RN-HV-Men	81	Dual	Menthol	800CU	0.47 ± 0.01	0.02 ± 0.01	3.0 ± 1.5
NRC102	RN	81	Dual	Regular	100CU	0.42 ± 0.01	0.03 ± 0.01	9.0 ± 1.5
NRC103	RN-Men	81	Dual	Menthol	100CU	0.44 ± 0.01	0.03 ± 0.01	9.0 ± 1.5
NRC104	RN-HT	56	Mono	Regular	0CU	0.51 ± 0.00	0.04 ± 0.02	13.0 ± 2.0
NRC105	RN-HT-Men	56	Mono	Menthol	0CU	0.46 ± 0.01	0.04 ± 0.02	13.0 ± 2.0
NRC200	RN	81	Dual	Regular	100CU	1.40 ± 0.03	0.07 ± 0.02	9.0 ± 1.5
NRC201	RN-Men	81	Dual	Menthol	100CU	1.34 ± 0.07	0.07 ± 0.02	9.0 ± 1.5
NRC300	RN	81	Dual	Regular	100CU	2.53 ± 0.04	0.12 ± 0.03	9.0 ± 1.5
NRC301	RN-Men	81	Dual	Menthol	100CU	2.54 ± 0.05	0.12 ± 0.03	9.0 ± 1.5
NRC302	RN-HT-Men	56	Mono	Menthol	0CU	2.50 ± 0.04	0.16 ± 0.03	13.0 ± 2.0
NRC400	RN	81	Dual	Regular	100CU	5.62 ± 0.18	0.26 ± 0.06	9.0 ± 1.5
NRC401	RN-Men	81	Dual	Menthol	100CU	5.54 ± 0.27	0.26 ± 0.06	9.0 ± 1.5
NRC402	RN-HT	81	Mono	Regular	100CU	6.03 ± 0.18	0.33 ± 0.06	13.0 ± 2.0
NRC405	RN-HT-Men	56	Mono	Menthol	0CU	5.96 ± 0.21	0.40 ± 0.08	13.0 ± 2.0
NRC404	RN-HT	56	Mono	Regular	0CU	8.08 ± 0.15	0.60 ± 0.12	13.0 ± 2.0
NRC500	RN-HT	81	Mono	Regular	100CU	12.06 ± 0.41	0.70 ± 0.15	13.0 ± 2.0
NRC501	RN-Men	81	Dual	Menthol	100CU	11.26 ± 0.11	0.60 ± 0.12	9.0 ± 1.5
NRC600	CN	81	Dual	Regular	100CU	17.36 ± 0.28	0.80 ± 0.15	10.5 ± 1.5
NRC601	CN-Men	81	Dual	Menthol	100CU	16.50 ± 0.17	0.80 ± 0.15	10.5 ± 1.5
NRC602	CN-HT-Men	56	Mono	Menthol	0CU	16.10 ± 0.52	1.10 ± 0.20	16.0 ± 2.0
NRC700	LTNR-HT	81	Mono	Regular	100CU	25.94 ± 0.65	1.60 ± 0.30	16.0 ± 2.0
NRC701	LTNR-Men	81	Dual	Menthol	100CU	25.83 ± 0.48	1.60 ± 0.30	12.0 ± 2.0

Definitions

CN	Conventional Nicotine
CN-HT-Men	Conventional Nicotine-High Tar-Menthol
CN-Men	Conventional Nicotine-Menthol
CU	Coresta Units
	[0CU = Non-perforated tipping paper]
Dual filter	Consists of 10 mm paper and 15 mm cellulose acetate segments
LTNR-HT	Low Tar Nicotine Ratio-High Tar
LTNR-Men	Low Tar Nicotine Ratio-Menthol
Mono filter	Consists of 25 mm cellulose acetate segment
PD	Pressure drop
RN	Reduced Nicotine
RN-HT	Reduced Nicotine-High Tar
RN-HT-Men	Reduced Nicotine-High Tar-Menthol
RN-HV	Reduced Nicotine-High Ventilation
RN-HV-Men	Reduced Nicotine-High Ventilation-Menthol
RN-Men	Reduced Nicotine-Menthol
TPMF	Tobacco Product Master File number

Marijuana Plant Material

Research grade marijuana products are available in a variety of cannabinoid content specifications as shown below. For detailed information on specific batches please refer to the NIDA website (http://www.drugabuse.gov/researchers/research-resources/nida-drug-supply-program-dsp/bulk-marijuana-plant-material-addendum-to-drug-supply-catalog). NIDA may also be able to develop bulk marijuana of other specific THC and CBD contents by mixing batches to meet researcher needs. For further information please contact the NIDA Drug Supply Program Director, Dr Hari Singh, at hsingh@nida.nih.gov.

Marijuana cigarettes and bulk marijuana plant material produced under the NIDA DSP are available at no cost to research investigators who have an NIH grant. Marijuana is also available to research investigators who are funded through non-Federal sources on a cost-reimbursement basis. Please see the Note at the end of the tables for more information on costs.

Marijuana cigarettes

The following represents the existing stocks of manufactured marijuana cigarettes, which will be made available to the research community until depleted. For additional information on the specific cannabinoid content please see http://www.drugabuse.gov/researchers/research-resources/nida-drug-supply-program-dsp/bulk-marijuana-plant-material-addendum-to-drug-supply-catalog. Please note that NIDA does not plan to manufacture marijuana cigarettes in the near future. Only bulk marijuana will generally be available for research:

Placebo Marijuana Cigarettes (Placebo)	0.001% THC
Marijuana Cigarettes (Medium)	2.0% THC
Marijuana Cigarettes (Medium)	3.6% THC
Marijuana Cigarettes (High)	5.6% THC
Marijuana Cigarettes (High)	6.4% THC

Bulk Marijuana

Bulk marijuana is currently available in the following general categories, and due to recent interest its strength is being provided for both THC and CBD as *Low* (<1%), *Medium* (1-5%), *High* (5-10%), and *Very High* (>10%). Bulk marijuana has small amounts of other cannabinoids (CBC, CBG, CBN, and THCV) which are reported in the batch specific details (http://www.drugabuse.gov/researchers/research-resources/nida-drug-supply-program-dsp/bulk-marijuana-plant-material-addendum-to-drug-supply-catalog).

Placebo marijuana (produced by solvent extraction)

1. THC (0%) / CBD (0%)

Low THC varieties

1. Low THC (<1%) / Medium CBD (1-5%)
2. Low THC (<1%) / High CBD (5-10%)
3. Low THC (<1%) / Very High CBD (>10%)

Medium THC varieties

1. Medium THC (1-5%) / Low CBD (<1%)
2. Medium THC (1-5%) / Medium CBD (1-5%)
3. Medium THC (1-5%) / High CBD (5-10%)
4. Medium THC (1-5%) / Very High CBD (>10%)

High THC varieties

1. High THC (5-10%) / Low CBD (<1%)
2. High THC (5-10%) / High CBD (5-10%)
3. High THC (5-10%) / Very High CBD (>10%)

Very high THC varieties

1. Very High THC (>10%) / Low CBD (<1%)

Important note regarding cost-reimbursement

The services and material from the NIDA Drug Supply Program are generally free to NIH-sponsored investigators. Some requests may incur a nominal fee depending on study status, funding source, and type of material being requested. Pursuant to HHS policy published May 21, 1999 marijuana for non-Federally funded research is to be provided on a cost-reimbursement basis. NIDA intends to implement the following pricing schedule for collection of fees for marijuana once HHS and NIH develop updated policies and transactional procedures on the specifics regarding cost-reimbursement of research substances for non-Federally supported projects. These policies and procedures may significantly impact the timing, mechanisms, and recipient of any collected fees but will not impact the shipments. An update will be posted once the final Guidance is received.

Marijuana Pricing Schedule

Item	Price
Non-placebo Cigarette	$10.96 each
Placebo Cigarette	$13.94 each
Bulk Marijuana	$2,497.00 per kilogram

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