Product Information

Benztropine (mesylate)
Item No. 16214

CAS Registry No.: 132-17-2
Formal Name: (3-endo)-3-(diphenylmethoxy)-8-methyl-8-azabicyclo[3.2.1]octane, monomethanesulfonate
Synonyms: Cogentin®, NSC 169913
MF: C21H25NO • CH3SO3H
FW: 403.5
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid

Laboratory Procedures

For long term storage, we suggest that benztropine (mesylate) be stored as supplied at -20°C. It should be stable for at least two years.

Benztropine (mesylate) is supplied as a crystalline solid. A stock solution may be made by dissolving the benztropine (mesylate) in the solvent of choice. Benztropine (mesylate) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of benztropine (mesylate) in these solvents is approximately 30 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of benztropine (mesylate) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of benztropine (mesylate) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Benztropine is a synthetic compound derived from the combination of atropine and diphenhydramine that acts centrally to antagonize M4 muscarinic acetylcholine receptors (Kᵢ = 0.59 nM in rat).1 It can also increase the availability of dopamine by inhibiting uptake through the dopamine transporter (Kᵢ = 160 nM).2 3 Benztropine has been used in the management of Parkinson’s disease symptoms to address involuntary tremor and dystonia.4 It has also been identified as a functional inhibitor of acid sphingomyelinase.5

References


Related Products

For a list of related products please visit: www.caymanchem.com/catalog/16214

SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent to you by email to your institution.

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Cayman Chemical Company makes no warranty or guarantee of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman warrants only to the original customer that the material will meet our specifications at the time of delivery. Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have any obligation or liability, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence. This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees. Buyer’s exclusive remedy and Cayman’s sole liability hereunder shall be limited to a refund of the purchase price, or at Cayman’s option, the replacement, at no cost to Buyer, of all material that does not meet our specifications.

For further details, please refer to our Warranty and Limitation of Remedy located on our website and in our catalog.

Crayman Chemical Company, 07/29/2014

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