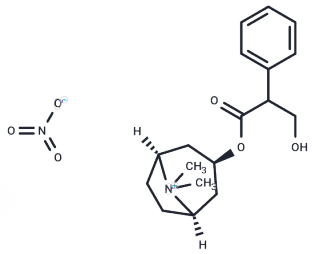
Data Sheet (Cat.No.T36204)

TargetMol

Methylatropine (nitrate)

Chemical Properties



CAS No. :	52-88-0
Formula:	C18H26N2O6
Molecular Weight:	366.414
Storage:	Store at low temperature Powder: -20°C for 3 years | In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.

Biological Description

Description	Methylatropine is an antagonist of muscarinic acetylcholine receptors (IC50= <0.1 nM in a radioligand binding assay using isolated porcine brain membranes) and a derivative of atropine .1,2It reduces acetylcholine-induced decreases in blood pressure in rats when administered intravenously with an ED50value of 5.5 μg/kg.2Methylatropine reduces salivation, induces mydriasis, and increases heart rate in dogs.3
Targets(IC50)	Others,AChR

Solubility Information

Solubility	Ethanol: 30 mg/mL (81.87 mM),Sonication is recommended. DMSO: 30 mg/mL (81.87 mM),Sonication is recommended. DMF: 30 mg/mL (81.87 mM),Sonication is recommended. PBS (pH 7.2): 10 mg/mL (27.29 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.7292 mL	13.6459 mL	27.2918 mL
5 mM	0.5458 mL	2.7292 mL	5.4584 mL
10 mM	0.2729 mL	1.3646 mL	2.7292 mL
50 mM	0.0546 mL	0.2729 mL	0.5458 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Schmeller, T., Sporer, F., Sauerwein, M., et al.Binding of tropane alkaloids to nicotinic and muscarinic acetylcholine receptorsPharmazie50(7)493-495(1995)

Brezenoff, H.E., Xiao, Y.-F., and Vargas, H.A comparison of the central and peripheral antimuscarinic effects of atropine and methylatropine injected systemically and into the cerebral ventriclesLife Sci.42(8)905-911(1988)

Albanus, L.Central and peripheral effects of anticholinergic compoundsActa Pharmacol. Toxicol. (Copenh)28(4) 305-326(1970)

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