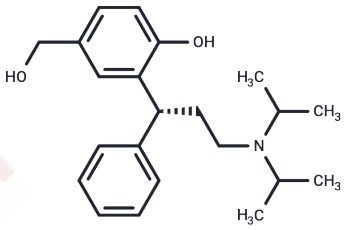
Data Sheet (Cat.No.T6364)

TargetMol

Desfesoterodine

Chemical Properties



CAS No. : 207679-81-0

Formula: C22H31NO2

Molecular Weight: 341.49

Storage: 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	Desfesoterodine (5-HMT) is a new muscarinic receptor antagonist with Kb of 0.84 nM.
Targets(IC50)	AChR
In vitro	Desfesoterodine is a major pharmacologically active metabolite of tolterodine. Desfesoterodine produces a competitive and concentration-dependent inhibition of carbachol-induced contraction of guinea-pig isolated urinary bladder strips. Desfesoterodine antagotizes muscarinic receptors with a pA2 of 9.1. Desfesoterodine causes a concentration-dependent inhibition of (-)3 H-QNB binding in homogenates of guinea-pig urinary bladder, parotid gland, heart and cerebral cortex. [1] Desfesoterodine has a similar pharmacological profile with tolterodine. [2] Intravenous infusion of Desfesoterodine produces a dose-dependent inhibition of the intravesical volume-induced urinary bladder contraction measured as the micturition pressure. [3]
In vivo	Desfesoterodine is significantly more potent at inhibiting acetylcholine-induced urinary bladder contraction than electrically induced salivation in the anaesthetised cat (ID50 15 and 40 nmol/kg, respectively. Desfesoterodine is three times more potent at the urinary bladder compared to the salivary gland. [1]

Solubility Information

Solubility	Ethanol: 63 mg/mL (184.49 mM),Sonication is recommended. DMSO: 65 mg/mL (190.34 mM),Sonication is recommended. H2O: < 1 mg/mL (insoluble or slightly soluble), (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (5.86 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.9283 mL	14.6417 mL	29.2834 mL
5 mM	0.5857 mL	2.9283 mL	5.8567 mL
10 mM	0.2928 mL	1.4642 mL	2.9283 mL
50 mM	0.0586 mL	0.2928 mL	0.5857 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

Nilvebrant L, et al. Pharmacol Toxicol, 1997, 81(4), 169-172.
Nilvebrant L, et al. Life Sci, 1997, 60(13-14), 1129-1136.
Modiri AR, et al. Urology, 2002, 59(6), 963-968.