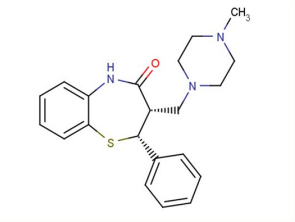
Data Sheet (Cat.No.T10008)

TargetMol
A DRUG SCREENING EXPERT

BTM-1086

Chemical Properties



CAS No.:	72293-17-5
Formula:	C21H25N3OS
Molecular Weight:	367.51
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	BTM-1086 is a potent gastric secretory inhibitor and an anti-ulcer agent.
Targets(IC_{50})	Muscarinic receptor: None
In vitro	BTM-1086 has a high affinity (pKi: 8.31-9.15) for the three muscarinic receptor subtypes in the guinea-pig cortex (M1), heart (M2), and salivary glands (M3) [1].
In vivo	BTM-1086 (0.1 to 1 mg/kg, p.o.) prevents the development of ulcers, but only weakly inhibits the histamine-induced gastric ulcer. The inhibitory activities of BTM-1086 are significantly higher than those of atropine sulfate. In the healing experiment with the acetic acid-induced stomach ulcer, BTM-1086 (1 mg/kg/day, p.o., x14) shows a significant healing effect, which is higher than that of propantheline bromide. BTM-1086 (0.2 mg/kg, i.d.) remarkably inhibit the gastric secretion 6 hr after pylorus ligation. The aspirin-induced reductions of the total acid and K+ as well as the increments of the volume and Na+ in the gastric secretion are prevented dose-dependently by pretreatment with BTM-1086. The LD50 value by oral, s.c., and i.v. administration with BTM-1086 is 880, 630, and 113 mg/kg, respectively, for male rats and 830, 650, and 119 mg/kg, respectively, for female rats [2].

Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.721 mL	13.605 mL	27.21 mL
5 mM	0.544 mL	2.721 mL	5.442 mL
10 mM	0.272 mL	1.361 mL	2.721 mL
50 mM	0.054 mL	0.272 mL	0.544 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference

1. Eltze M, et al. Affinity profiles of BTM-1086 and BTM-1041 at muscarinic receptor subtypes and at H1- and alpha 1-receptors. Eur J Pharmacol. 1989 Nov 7;170(3):225-34.

2. Hajimu Y, et al. Antiulcer Effect of (-)-cis-2, 3-Dihydro-3-(4-Methylpiperazinylmethyl)-2-Phenyl-1, 5-Benzothiazepin-4-(5H)-One Hydrochloride (BTM-1086) in Experimental Animals. Japan J Pharmacol. 41, 283-292 (1986).

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