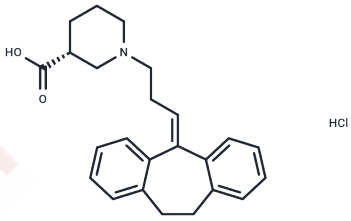
Data Sheet (Cat.No.T12703)

TargetMol

ReN-1869 hydrochloride

Chemical Properties



CAS No. : 170149-76-5

Formula: C24H28ClNO2

Molecular Weight: 397.94

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	ReN 1869 hydrochloride is a novel and selective histamine H1 receptor antagonist.
Targets(IC50)	Histamine Receptor
In vitro	ReN 1869 is a highly selective tricyclic antihistamine that functions as a histamine H1 receptor antagonist. At a concentration of 10 μM, ReN 1869 demonstrates affinity primarily to the histamine H1 receptor (guinea pig brain, [3H]pyrilamine) with a Ki of 0.19±0.04 μM, and to the non-selective σ site [guinea pig brain, [3H]1,3-di-tolylguanidine (DTG)] with a Ki of 0.45 μM, dose-dependently reducing responses with an IC50 of 1.70±0.002 μM.
In vivo	ReN 1869 is a novel, selective histamine H(1) receptor antagonist.?It is orally available, well tolerated, easily enters the central nervous system (CNS) but no adverse effects are seen in mice at 300 mg/kg.?ReN 1869 at 0.01-10 mg/kg is antinociceptive in tests of chemical nociception in rodents (formalin, capsaicin, phenyl quinone writhing) but not in thermal tests (hot plate and tail flick).?ReN 1869 amplifies the analgesic action of morphine but does not show tolerance after chronic dosing.?Moreover, the compound is effective against inflammation of neurogenic origin (antidromic nerve stimulation, histamine-evoked edema) but not in carrageenan-induced inflammation.?We suggest that ReN 1869, via H(1) blockade, counteracts the effect of histamine liberated from activated mast cells and inhibits pain transmission in the dorsal spinal cord.?ReN 1869 represents a new class of antihistamines with pain-relieving properties that probably is mediated centrally through histamine H(1) receptors but alternative mechanisms of action cannot be excluded.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.5129 mL	12.5647 mL	25.1294 mL
5 mM	0.5026 mL	2.5129 mL	5.0259 mL
10 mM	0.2513 mL	1.2565 mL	2.5129 mL
50 mM	0.0503 mL	0.2513 mL	0.5026 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

Olsen UB, et al. ReN 1869, a novel tricyclic antihistamine, is active against neurogenic pain and inflammation. Eur J Pharmacol. 2002 Jan 18;435(1):43-57.