Data Sheet (Cat.No.T214271)

TargetMol

Osutidine

Chemical Properties

CAS No. : 140695-21-2

Formula: C19H28N4O5S2

Molecular Weight: 456.58

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	Osutidine is a selective histamine H2 receptor antagonist that effectively inhibits histamine-stimulated gastric acid secretion. It does not affect the accumulation of [^{14}C] amino[xylen] bipyridine induced by carbachol or dibutyryl cyclic adenosine monophosphate. Osutidine exhibits irreversible inhibition, including non-competitive inhibition, and is utilized in the study of gastric mucosal injury.
Targets(IC50)	Histamine Receptor
In vitro	Osutidine (T-593) inhibits the accumulation of [^{14}C]AP in isolated canine gastric mucosal cells stimulated by 10^{-4} M histamine in a concentration-dependent manner. Its IC_{50} value is 1.85×10^{-6} M. For the accumulation of [^{14}C]AP stimulated by 10^{-4} M dbcAMP in the same cells, Osutidine shows only a slight inhibitory effect, with a maximum inhibition rate of 20-32%.
In vivo	Osutidine (T-593), administered as a single intraperitoneal injection at doses ranging from 6 to 60 mg/kg, offers significant protective effects on the gastric mucosa of Sprague-Dawley rats and markedly inhibits ethanol-induced gastric mucosal damage in a dose-dependent manner.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1902 mL	10.951 mL	21.902 mL
5 mM	0.438 mL	2.1902 mL	4.3804 mL
10 mM	0.219 mL	1.0951 mL	2.1902 mL
50 mM	0.0438 mL	0.219 mL	0.438 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.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481