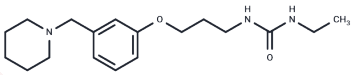
Data Sheet (Cat.No.T31195)

TargetMol

Dalcotidine

Chemical Properties



CAS No. : 120958-90-9

Formula: C18H29N3O2

Molecular Weight: 319.44

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	Dalcotidine (KU 1257) is a novel histamine H2 receptor antagonist with histamine H9 receptor antagonistic activity and antisecretory effects.The Ki value for binding to guinea pig cerebral cortex was 0.040 The KB value for antagonism of histamine-induced positive chronotropic responses in the right atrium of isolate guinea pigs was 0.041. Dalcotidine improves the quality of ulcer healing, and may contribute to a reduction in ulcer recurrence and relapse rates.
Targets(IC50)	Histamine Receptor
In vivo	Dalcotidine (10-50 mg/kg x 2/day; oral; rats)markedly promoted the well-balanced healing of gastric ulcers, as evidenced by the reduction of ulcers, regeneration of mucosa and proliferation of connective tissue. Dalcotidine caused an increase in gastric mucus secretion in the regenerated mucosa around the gastric ulcers. Dalcotidine is characterized by a potent promoting action on the healing of chronic ulcers, suggesting that the increase in gastric mucus secretion might be associated with the antiulcer actions of Dalcotidine in part.[2]

Solubility Information

Solubility	DMSO: 3.6 mg/mL (11.27 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.1305 mL	15.6524 mL	31.3048 mL
5 mM	0.6261 mL	3.1305 mL	6.261 mL
10 mM	0.313 mL	1.5652 mL	3.1305 mL
50 mM	0.0626 mL	0.313 mL	0.6261 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

Sekiguchi H, et al. Pharmacological profiles of the new histamine H2-receptor antagonist N-ethyl-N'-[3-[3-(piperidinomethyl)phenoxy] propyl] urea. Arzneimittelforschung. 1993;43(2):129-133.
Sekiguchi H, et al. Healing-promoting action of the new histamine H2-receptor antagonist N-ethyl-N'-[3-[3-(piperidinomethyl)phenoxy]propyl]urea with dual action on chronic gastric and duodenal ulcers induced by acetic acid in rats. Arzneimittelforschung. 1993;43(2):139-143.
Sekiguchi H, et al. Effects of the new histamine H2-receptor antagonist N-ethyl-N'-[3-[3-(piperidinomethyl) phenoxy]propyl] urea with potent gastric mucosal protective activity on acute gastric lesions and duodenal ulcers in rats. Arzneimittelforschung. 1993;43(2):134-138.
Sekiguchi H, et al. Influence of KU-1257 on the recurrence and relapse of acetic acid-induced chronic gastric ulcers in rats. Nihon Yakurigaku Zasshi. 1996;107(2):67-78.