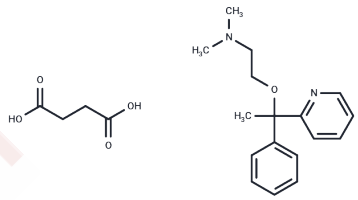
Data Sheet (Cat.No.T1115)

TargetMol

Doxylamine succinate

Chemical Properties



CAS No. : 562-10-7

Formula: C21H28N2O5

Molecular Weight: 388.46

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	Doxylamine Succinate is a pyridine derivate histamine H1 antagonist with pronounced sedative properties. Doxylamine succinate (Decapryn) competitively blocks the histamine H1 receptor and limits the typical allergic and anaphylactic responses, including bronchoconstriction, vasodilation, increased capillary permeability, and spasmodic contraction of the gastrointestinal smooth muscle, caused by actions of histamine on bronchial and gastrointestinal smooth muscles, and on capillaries. This drug also prevents histamine-induced pain and itching of the skin and mucous membranes.
Targets(IC50)	Histamine Receptor
In vitro	In B6C3F1 mice, the impact of Doxylamine on microsomal enzyme activity and serum thyroid hormone levels was investigated by administering Doxylamine succinate for 7 or 15 days with dietary incorporation at levels of 0, 40, 375, 750, or 1500 ppm, corresponding to the free base form of Doxylamine. Findings reveal that Doxylamine acts as an inducer of hepatic microsomal cytochrome P450 enzymes, consistent with the hypothesis that Doxylamine increases liver enzyme activities involved in T4 metabolism in B6C3F1 mice.

Solubility Information

Solubility	DMSO: 100 mg/mL (257.43 mM),Sonication is recommended. H2O: 100 mg/mL (257.43 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 4 mg/mL (10.3 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	2.5743 mL	12.8713 mL	25.7427 mL
5 mM	0.5149 mL	2.5743 mL	5.1485 mL
10 mM	0.2574 mL	1.2871 mL	2.5743 mL
50 mM	0.0515 mL	0.2574 mL	0.5149 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

Bookstaff RC, et al. Toxicol Appl Pharmacol, 1996, 141(2), 584-594.
Ge S, Wang X, Hou Y, et al. Repositioning of histamine H1 receptor antagonist: Doxepin inhibits viropexis of SARS-CoV-2 Spike pseudovirus by blocking ACE2. European Journal of Pharmacology. 2021 Apr 5;896:173897. doi: 10.1016/j.ejphar.2021.173897. Epub 2021 Jan 23.
Ge S, Wang X, Hou Y, et al. Repositioning of histamine H1 receptor antagonist: Doxepin inhibits viropexis of SARS-CoV-2 Spike pseudovirus by blocking ACE2[J]. European Journal of Pharmacology. 2021: 173897.