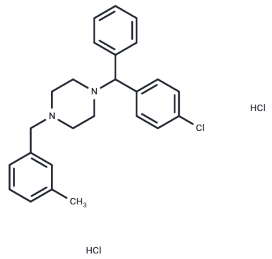
Data Sheet (Cat.No.T1110)

TargetMol

Meclizine dihydrochloride

Chemical Properties



CAS No. :	1104-22-9
Formula:	C25H27ClN2·2HCl
Molecular Weight:	463.87
Appearance:	no data available
Storage:	keep away from moisture Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	Meclizine dihydrochloride (NSC28728) is a histamine H1 antagonist used in the treatment of motion sickness, vertigo, and nausea during pregnancy and radiation sickness.
Targets(IC50)	Apoptosis,Histamine Receptor
In vitro	Meclizine increases the expression of mouse CAR target genes in a CAR-dependent manner.
In vivo	In vitro, Meclizine exhibits dose-dependent augmentation of mCAR transactivation and enhances the recruitment of the coactivator SRC-1 (steroid receptor coactivator-1) to the receptor. Conversely, in mouse hepatocytes expressing only hCAR and not mCAR, Meclizine inhibits hCAR transcriptional activation and suppresses the expression of luminal-induced CAR downstream genes, which include CYP2B10, CYP3A11, and CYP1A2 (cytochrome P450 monooxygenases). Therefore, Meclizine acts as an agonist ligand for mouse CAR (constitutive androstane receptor) but as a reverse agonist for human CAR.
Cell Research	HepG2 cells are cultured in 24-well dishes with DMEM supplemented with 10% charcoal-stripped calf serum. Cells are transfected using calcium phosphate with 100 ng of receptor expression vectors, 300 ng of luciferase reporter plasmids, and 100 ng of pSV2-β-galactosidase as internal control of transfection efficiency. Drugs are added 12 h after transfection, and cells are incubated for an additional 24 h. The cell lysate is assayed for luciferase activity and normalized to β-galactosidase activity.(Only for Reference)

Solubility Information

Solubility	DMSO: 15 mg/mL (32.34 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1558 mL	10.7789 mL	21.5578 mL
5 mM	0.4312 mL	2.1558 mL	4.3116 mL
10 mM	0.2156 mL	1.0779 mL	2.1558 mL
50 mM	0.0431 mL	0.2156 mL	0.4312 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.

Reference

King CT, et al. J Pharmacol Exp Ther, 1965, 147, 391-398.
Huang W, et al. Mol Endocrinol, 2004, 18(10), 2402-2408.
Gohil VM, et al. Hum Mol Genet, 2011, 20(2), 294-300.