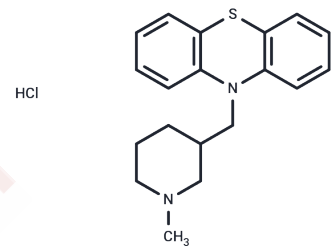
Data Sheet (Cat.No.T61153)

TargetMol

Mepazine hydrochloride

Chemical Properties



CAS No. : 2975-36-2

Formula: C19H23ClN2S

Molecular Weight: 346.92

Storage: Store at low temperature,Keep away from moisture
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	Mepazine hydrochloride (Pecazine hydrochloride) is a potent MALT1 inhibitor with anticancer and antitumor activities. Mepazine hydrochloride inhibits RANK-induced osteoclastogenesis, suppresses MALT1 activity and tumor growth in pancreatic cancer.
Targets(IC50)	Apoptosis,MALT
In vitro	Mepazine hydrochloride was most effective in inhibiting GSTMALT1 FL and GSTMALT1 325-760 with IC50 values of 0.83 and 0.42 μM. Mepazine hydrochloride had the strongest effects and MALT1 activity was reduced by at least 75% in all ABC-DLBCL cells at 10 μM. Mepazine hydrochloride and thioridazine treatment led to a significant decrease of IL-2 secretion in PBMCs. [1]
In vivo	Mepazine hydrochloride and thioridazine could also exert effects on lymphoma growth in vivo in a murine DLBCL xenogeneic tumor model. Starting 1 day after injection, the mice were treated by intraperitoneal (i.p.) administration of solvent or either Mepazine hydrochloride (16 mg/kg) or thioridazine (12 mg/kg). In control-treated mice, massive tumors grew from both DLBCL cell lines within 3 weeks of transplantation. Daily administration of Mepazine hydrochloride or thioridazine strongly impaired the expansion of the ABC-DLBCL cell line OCI-Ly10. Mepazine hydrochloride and thioridazine strongly reduced the progression of OCI-Ly10 tumors while having no effect on the growth of Su-DHL-6 tumors in this setting. [1]

Solubility Information

Solubility	DMSO: 40 mg/mL (115.3 mM),Sonication is recommended. H2O: 1 mg/mL (2.88 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: 2 mg/mL (5.77 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	2.8825 mL	14.4125 mL	28.8251 mL
5 mM	0.5765 mL	2.8825 mL	5.765 mL
10 mM	0.2883 mL	1.4413 mL	2.8825 mL
50 mM	0.0577 mL	0.2883 mL	0.5765 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

Nagel D, et al. Pharmacologic inhibition of MALT1 protease by phenothiazines as a therapeutic approach for the treatment of aggressive ABC-DLBCL. Cancer Cell. 2012 Dec 11;22(6):825-37.