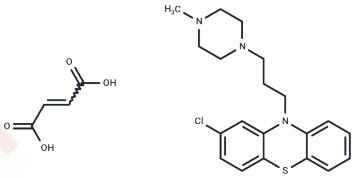
Data Sheet (Cat.No.T0385)

TargetMol

Prochlorperazine Maleate

Chemical Properties



CAS No. : 84-02-6

Formula: C28H32ClN3O8S

Molecular Weight: 606.09

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	Prochlorperazine Maleate (Capazine) is a phenothiazine antipsychotic used principally in the treatment of NAUSEA; VOMITING; and VERTIGO. It is more likely than CHLORPROMAZINE to cause EXTRAPYRAMIDAL DISORDERS.
Targets(IC50)	Dopamine Receptor,NADPH
In vitro	Prochlorperazine down-regulates cyclin E2 and reduces cell proliferation in MCF-7 cells that are resistant to tamoxifen. It has the potential to impact on estrogen receptor (ER) function and alter response to endocrine therapy[2].
In vivo	Prochlorperazine is showed to be able to induce antinociception in mice. prochlorperazine-treated mice show a complete integrity of motor co-ordination on the rota-rod test, normal spontaneous motility, as well as exploratory behaviour as revealed by the hole-board test. The antinociceptive effect of prochlorperazine appears to be due to the antagonism of D2 receptors since the increase of the pain threshold induced by the investigated compound is prevented by pretreatment with the D2 agonist quinpirole[1].
Cell Research	Cells are treated 5 μM of prochlorperazine for 5 days and cell proliferation is measured by methylene blue staining or for 2 days and cyclin E2 mRNA levels are measured by qPCR.(Only for Reference)

Solubility Information

Solubility	H2O: < 1 mg/mL (insoluble or slightly soluble), Ethanol: 2 mg/mL (3.3 mM),Heating is recommended. DMSO: 41.25 mg/mL (68.06 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 (3.3 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	1.6499 mL	8.2496 mL	16.4992 mL
5 mM	0.330 mL	1.6499 mL	3.2998 mL
10 mM	0.165 mL	0.825 mL	1.6499 mL
50 mM	0.033 mL	0.165 mL	0.330 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

Ghelardini C, et al. Pharmacol Res. 20014, 50(3):351-358.
Dong L, Shen S, Chen W, et al. Discovery of Novel Inhibitors Targeting Human O-GlcNAcase: Docking-Based Virtual Screening, Biological Evaluation, Structural Modification, and Molecular Dynamics Simulation. Journal of chemical information and modeling. 2019, 59(10): 4374-4382.
Huang L, et al. PLoS One. 2011, 6(7):e22274.
Dong L, Shen S, Chen W, et al. Discovery of Novel Inhibitors Targeting Human O-GlcNAcase: Docking-Based Virtual Screening, Biological Evaluation, Structural Modification, and Molecular Dynamics Simulation[J]. Journal of chemical information and modeling. 2019, 59(10): 4374-4382.