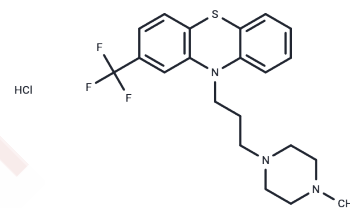


Trifluoperazine dihydrochloride

Chemical Properties

CAS No. :	440-17-5
Formula:	C ₂₁ H ₂₆ Cl ₂ F ₃ N ₃ S
Molecular Weight:	480.43
Storage:	Store at low temperature Powder: -20°C for 3 years In solvent: -80°C for 1 year <i>Actual storage temperature shall be subject to the COA.</i>



Biological Description

Description	Trifluoperazine dihydrochloride (SKF5019) is a potent dopamine D2 receptor inhibitor used as an antipsychotic and an antiemetic.
Targets(IC50)	CaMK,Adrenergic Receptor,Autophagy,Dopamine Receptor,Influenza Virus,P-gp
In vitro	Trifluoperazine binds to α 1A- and α 1B-adrenoceptor with K_i value of 27.6 nM and 19.2 nM, respectively, with α 1B/ α 1A ratio of 0.7. [2] Trifluoperazine inhibits Mycobacterium tuberculosis (Mtb) with MICs of 7.6 μ g/mL. [3] Trifluoperazine (< 14.78 mM) suppresses the activities of the mouse splenic NK cell cytotoxicity and the effector-target cell conjugation in a dose dependent manner. Trifluoperazine suppresses interferon-alpha or interleukin-2 induced augmentation of the cytolytic activity of NK cells. [4] Trifluoperazine inhibits the gene expression of voltage-dependent potassium channel Kv2.1 from human brain (hKv2.1). [5]
In vivo	Trifluoperazine dose dependently decreases avoidance responses and increases response failures in rats where behavior is maintained under a discrete-trial avoidance. [6]

Solubility Information

Solubility	H ₂ O: 71.43 mg/mL (148.68 mM),Sonication is recommended. DMSO: 247.5 mg/mL (515.16 mM),Sonication is recommended. Ethanol: 89 mg/mL (185.25 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: 3.3 mg/mL (6.87 mM),Sonication is recommended. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.0815 mL	10.4073 mL	20.8147 mL
5 mM	0.4163 mL	2.0815 mL	4.1629 mL
10 mM	0.2081 mL	1.0407 mL	2.0815 mL
50 mM	0.0416 mL	0.2081 mL	0.4163 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

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