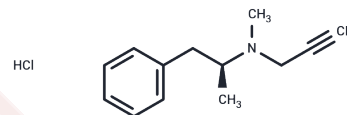


Selegiline hydrochloride

Chemical Properties

CAS No. :	14611-52-0
Formula:	C ₁₃ H ₁₈ ClN
Molecular Weight:	223.74
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	Selegiline hydrochloride is a selective, reversible inhibitor of MAO-B ($K_i = 0.091 \mu\text{M}$) over MAO-A ($K_i = 9.06 \mu\text{M}$). Monoamine oxidase (MAO) inhibitors have utility in ameliorating a variety of neurological conditions, including depression.
Targets(IC50)	MAO, Monoamine Oxidase

Solubility Information

Solubility	Ethanol: 30 mg/mL (134.08 mM), Sonication is recommended. H ₂ O: 20 mg/mL (89.39 mM), Sonication is recommended. DMSO: 30 mg/mL (134.08 mM), Sonication is recommended. ($< 1 \text{ mg/ml}$ refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween-80+45% Saline: 3.3 mg/mL (14.75 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	4.4695 mL	22.3474 mL	44.6947 mL
5 mM	0.8939 mL	4.4695 mL	8.9389 mL
10 mM	0.4469 mL	2.2347 mL	4.4695 mL
50 mM	0.0894 mL	0.4469 mL	0.8939 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

Wimbiscus M, et al. MAO inhibitors: risks, benefits, and lore. Cleve Clin J Med. 2010 Dec;77(12):859-82.

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La Regina G, et al. Synthesis, structure-activity relationships and molecular modeling studies of new indole inhibitors of monoamine oxidases A and B. Bioorg Med Chem. 2008 Nov 15;16(22):9729-40.

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