

## Tacrine

## Chemical Properties

CAS No. :	321-64-2
Formula:	C13H14N2
Molecular Weight:	198.264
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	Tacrine (CS 12602) is an indirect cholinergic agonist and centrally acting anticholinesterase. It is approved for the treatment of Alzheimer's disease.
Targets(IC50)	AChR,Cholinesterase (ChE)

## Solubility Information

Solubility	DMSO: 242.50 mg/mL (1223.12 mM),Sonication is recommended. H2O: Insoluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: < 10 mg/mL (50.44 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10.00 mg/mL (50.44 mM),Solution. <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	5.0439 mL	25.2194 mL	50.4388 mL
5 mM	1.0088 mL	5.0439 mL	10.0878 mL
10 mM	0.5044 mL	2.5219 mL	5.0439 mL
50 mM	0.1009 mL	0.5044 mL	1.0088 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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- Korábečný J, Spilovská K, Benek O, Musílek K, Soukup O, Kuča K. [Tacrine and its derivatives in the therapy of Alzheimers disease]. *Ceska Slov Farm.* 2012 Oct;61(5):210-21. Review. Czech. PubMed PMID: 23256654.

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