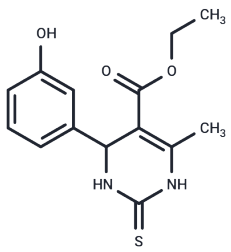
Data Sheet (Cat.No.T4048)

TargetMol

Monastrol

Chemical Properties



CAS No. : 329689-23-8

Formula: C14H16N2O3S

Molecular Weight: 292.35

Storage: Keep away from direct sunlight
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	Monastrol ((±)-Monastrol) is a potent and cell-permeable inhibitor of the mitotic kinesin Eg5.
Targets(IC50)	Apoptosis,Kinesin

Solubility Information

Solubility	DMSO: 55 mg/mL (188.13 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 (6.84 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	3.4206 mL	17.1028 mL	34.2056 mL
5 mM	0.6841 mL	3.4206 mL	6.8411 mL
10 mM	0.3421 mL	1.7103 mL	3.4206 mL
50 mM	0.0684 mL	0.3421 mL	0.6841 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

Cochran JC, et al. Monastrol inhibition of the mitotic kinesin Eg5. J BiolChem. 2005 Apr 1;280(13):12658-67.
Marques LA, et al. Antiproliferative activity of monastrol in human adenocarcinoma (MCF-7) and non-tumor (HB4a) breast cells. Naunyn Schmiedebergs Arch Pharmacol. 2016 Dec;389(12):1279-1288.

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