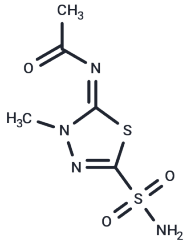
Data Sheet (Cat.No.T0106)

TargetMol

Methazolamide

Chemical Properties



CAS No. : 554-57-4

Formula: C5H8N4O3S2

Molecular Weight: 236.27

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	Methazolamide (CL 8490) is a carbonic anhydrase inhibitor that is used as a diuretic and in the treatment of glaucoma.
Targets(IC50)	Apoptosis,Caspase,Carbonic Anhydrase,ROS
In vitro	Methazolamide is a carbonic anhydrase inhibitor that inhibits hCA I (Ki: 50 nM), hCA II (Ki: 14 nM) and bCA IV (Ki: 36 nM) isoforms.
In vivo	Methazolamide is a carbonic anhydrase inhibitor that inhibits hCA I (Ki: 50 nM), hCA II (Ki: 14 nM) and bCA IV (Ki: 36 nM) isoforms.

Solubility Information

Solubility	H2O: < 1 mg/mL (insoluble or slightly soluble), DMSO: 250 mg/mL (1058.11 mM),Sonication is recommended. Ethanol: 3 mg/mL (12.7 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 10 mg/mL (42.32 mM),Solution. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (8.46 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	4.2324 mL	21.1622 mL	42.3245 mL
5 mM	0.8465 mL	4.2324 mL	8.4649 mL
10 mM	0.4232 mL	2.1162 mL	4.2324 mL
50 mM	0.0846 mL	0.4232 mL	0.8465 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

Casini A, et al. Bioorg Med Chem Lett, 2003, 13(5), 841-845.
Kiwull-Schöne HF, et al. Am J Physiol Regul Integr Comp Physiol, 2009, 297(3), R648-654.
Pocker Y, et al. Biochemistry, 1967, 6(3), 668-678.