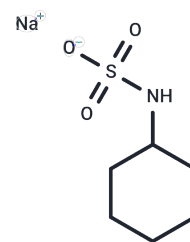


Cyclamic acid sodium

Chemical Properties

CAS No. :	139-05-9
Formula:	C ₆ H ₁₂ NNaO ₃ S
Molecular Weight:	201.22
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	Cyclamic acid sodium (Cyclohexylsulfamicacidsodium) is a carbonic anhydrase inhibitor and one of the most widely used artificial sweeteners in food and pharmaceuticals. Cyclamic acid sodium shows moderate anticonvulsant activity in a maximal electroshock convulsive seizure model. Cyclamic acid sodium is used in cancer research.
Targets(IC50)	Apoptosis, Carbonic Anhydrase, Necroptosis
In vivo	Cyclamic acid sodium (6000 mg/kg/day; intraperitoneal injection; for 5 days) induced acute DILI mouse model can be established successfully. The toxicity of sodium cyclamate to the liver showed a dose-response and time-response relationship. Cyclamic acid sodium induced liver, heart, and kidney injury are closely related to the inflammatory response mediated by TNF- α and IL-1 β . [2]

Solubility Information

Solubility	H ₂ O: 45 mg/mL (223.64 mM), Sonication is recommended. DMSO: 7.5 mg/mL (37.27 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: 1 mg/mL (4.97 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	4.9697 mL	24.8484 mL	49.6968 mL
5 mM	0.9939 mL	4.9697 mL	9.9394 mL
10 mM	0.497 mL	2.4848 mL	4.9697 mL
50 mM	0.0994 mL	0.497 mL	0.9939 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

Leban I, et al. Structures of artificial sweeteners--cyclamic acid and sodium cyclamate with other cyclamates. Acta Crystallogr B. 2007 Jun;63(Pt 3):418-25.

Zhou Q, et al. Establishment of a Stable Acute Drug-Induced Liver Injury Mouse Model by Sodium Cyclamate. J Inflamm Res. 2022;15:1599-1615.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481