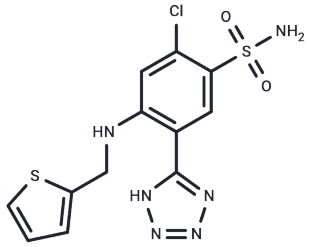
Data Sheet (Cat.No.T10441)

TargetMol

Azosemide

Chemical Properties



CAS No. : 27589-33-9

Formula: C12H11ClN6O2S2

Molecular Weight: 370.84

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	Azosemide is a potent NKCC1 inhibitor (IC50s: 0.246μM and 0.197μM for hNKCC1A and NKCC1B).
Targets(IC50)	Na-K-Cl cotransporter
In vitro	Azosemide inhibits the human sodium-potassium-chloride cotransporter variants hNKCC1B and hNKCC1A [1].
In vivo	Azosemide shows a shorter terminal half-life (50.9% decrease) and MRT (64.1% decrease), smaller AUC (81.9% decrease), faster CL (454% increase), CLNR (307% increase) and CLR (853% increase) for NARs [2].

Solubility Information

Solubility	DMSO: 250 mg/mL (674.15 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: 10 mg/mL (26.97 mM),Solution. 10% DMSO+90% Saline: < 10 mg/mL (26.97 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. *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	2.6966 mL	13.4829 mL	26.9658 mL
5 mM	0.5393 mL	2.6966 mL	5.3932 mL
10 mM	0.2697 mL	1.3483 mL	2.6966 mL
50 mM	0.0539 mL	0.2697 mL	0.5393 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

Hampel P, et al. Azosemide is more potent than bumetanide and various other loop diuretics to inhibit the sodium-potassium-chloride-cotransporter human variants hNKCC1A and hNKCC1B. Sci Rep. 2018 Jun 29;8(1):9877.
Kim EJ, et al. Pharmacokinetics and pharmacodynamics of intravenous azosemide in mutant Nagaseanalbuminemic rats. Drug Metab Dispos. 2003 Feb;31(2):194-201.

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