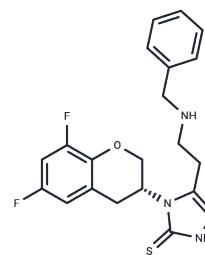


Zamicastat

Chemical Properties

CAS No. :	1080028-80-3
Formula:	C ₂₁ H ₂₁ F ₂ N ₃ O ₅
Molecular Weight:	401.47
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	Zamicastat (BIA 5-1058) is an inhibitor of dopamine β -hydroxylase (DBH) and a concentration-dependent dual inhibitor of P-gp and BCRP, with IC ₅₀ values of 73.8 μ M and 17.0 μ M, respectively.
Targets(IC ₅₀)	BCRP,Hydroxylase,P-gp
In vivo	In the Dahl SS rat, Zamicastat (10, 30 and 100 mg/kg/day; oral bolus, 7 days) is tested acutely against salt-induced hypertension. Zamicastat produces a dose-dependent decrease in blood pressure[2].

Solubility Information

Solubility	DMSO: 150 mg/mL (373.63 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: 4 mg/mL (9.96 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	2.4908 mL	12.4542 mL	24.9085 mL
5 mM	0.4982 mL	2.4908 mL	4.9817 mL
10 mM	0.2491 mL	1.2454 mL	2.4908 mL
50 mM	0.0498 mL	0.2491 mL	0.4982 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

- Bicker J, et al. In vitro assessment of the interactions of dopamine β -hydroxylase inhibitors with human P-glycoprotein and Breast Cancer Resistance Protein. *Eur J Pharm Sci.* 2018 May 30;117:35-40.
- Igreja B, et al. Effects of Zamicastat treatment in a genetic model of salt-sensitive hypertension and heart failure. *Eur J Pharmacol.* 2019 Jan 5;842:125-132.

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