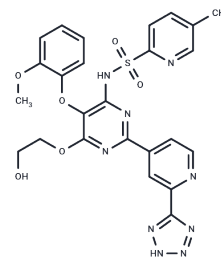


Clazosentan

Chemical Properties

CAS No. :	180384-56-9
Formula:	C ₂₅ H ₂₃ N ₉ O ₆ S
Molecular Weight:	577.57
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	Clazosentan (Ro 61-1790) is a selective antagonist of the endothelin A receptor (ETA receptor) that inhibits ET-1-mediated vasoconstriction, preventing cerebral vasospasm and vasospasm-associated cerebral infarction.
Targets(IC50)	Endothelin Receptor
In vitro	Clazosentan is an effective competitive antagonist of ET (A) receptor-mediated ET-1 and its precursor large ET-1 on cerebral vasoconstriction[2].
In vivo	In Rats, Clazosentan (10 μM, 0.05 mL / kg ; intracisternal injection) Inhibited the contractile responses to ET-1, without preventing SAH-induced upregulation of ET receptors in cerebral arteries[2].

Solubility Information

Solubility	DMSO: 75 mg/mL (129.85 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 7.5 mg/mL (12.99 mM),Suspension. <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	1.7314 mL	8.657 mL	17.3139 mL
5 mM	0.3463 mL	1.7314 mL	3.4628 mL
10 mM	0.1731 mL	0.8657 mL	1.7314 mL
50 mM	0.0346 mL	0.1731 mL	0.3463 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

- Juif PE, et al. Clinical Pharmacology of Clazosentan, a Selective Endothelin A Receptor Antagonist for the Prevention and Treatment of aSAH-Related Cerebral Vasospasm. *Front Pharmacol.* 2021 Feb 4;11:628956.
- Povlsen GK, et al. MEK1/2 inhibitor U0126 but not endothelin receptor antagonist clazosentan reduces upregulation of cerebrovascular contractile receptors and delayed cerebral ischemia, and improves outcome after subarachnoid hemorrhage in rats. *J Cereb Blood Flow Metab.* 2015 Feb;35(2):329-37.
- Vatter H, et al. Cerebrovascular characterization of clazosentan, the first nonpeptide endothelin receptor antagonist clinically effective for the treatment of cerebral vasospasm. Part I: inhibitory effect on endothelin(A) receptor-mediated contraction. *J Neurosurg.* 2005 Jun;102(6):1101-7.
- Verri WA Jr, Guerrero AT, Fukada SY, Valerio DA, Cunha TM, Xu D, Ferreira SH, Liew FY, Cunha FQ. IL-33 mediates antigen-induced cutaneous and articular hypernociception in mice. *Proc Natl Acad Sci U S A.* 2008 Feb 19;105(7):2723-8.

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