Fuzapladib sodium

Cat. No.: HY-19151A

CAS No.: 141284-73-3

Molecular Formula: $C_{15}H_{20}F_3N_3NaO_3S$

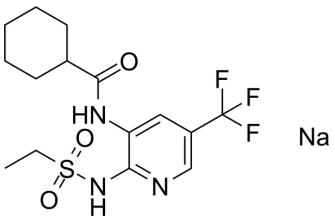
Molecular Weight: 402.39

Target: Phospholipase; Integrin

Pathway: Metabolic Enzyme/Protease; Cytoskeleton

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (248.52 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	2.4852 mL	12.4258 mL	24.8515 mL
	5 mM	0.4970 mL	2.4852 mL	4.9703 mL
	10 mM	0.2485 mL	1.2426 mL	2.4852 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (6.21 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (6.21 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (6.21 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Fuzapladib (IS-741) sodium, an orally active leukocyte-function-associated antigen type 1 (LFA-1) activation inhibitor, is a leukocyte adhesion molecule. Fuzapladib sodium is also a phospholipase A2 (PLA2) inhibitor. Fuzapladib sodium exerts anti-inflammatory effects by inhibiting leukocyte migration into the inflammatory site[1][2].

In Vitro

Fuzapladib sodium (IS-741 sodium) (1 μM, 3 h) can significantly inhibit the adhesion of HL-60 cells to HUVEC under the stimulation of lipopolysaccharide[3].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

Fuzapladib sodium (IS-741 sodium) (p.o., 50 mg/kg, 7 days) inhibits neutrophil infiltration into inflamed lesions, and is effective for attenuating rat trinitrobenzene sulfonic acid (TNBS) ileitis[4].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Rats[2]
Dosage:	50 mg/kg
Administration:	P.o.; for 7 days
Result:	Significantly reduced myeloperoxidase (MPO) activity and mucosal IL-8 levels in rat ileum, reduced polymorphonuclear cells and Mac-1 positivity Infiltration of cells into inflammatory lesions, effectively alleviated trinitrobenzenesulfonic acid (TNBS)-induced ileitis.

REFERENCES

[1]. Shikama H, et al. Effect of IS-741 on cell adhesion between human umbilical vein endothelial cells and HL-60 cells. Biol Pharm Bull. 1999 Feb;22(2):127-31.

[2]. Tetsuya Fukunaga, et al. A novel diamino-pyridine derivative (IS-741) attenuates rat ileitis induced by trinitrobenzene sulfonic acid. J Gastroenterol. 2003;38(5):451-9.

[3]. Noriyuki Kaji, et al. Fuzapladib reduces postsurgical inflammation in the intestinal muscularis externa. J Vet Med Sci. 2023 Sep 21.

[4]. C Bassi. IS-741 (Ishihara Sangyo). Curr Opin Investig Drugs. 2001 Apr;2(4):510-2.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA