Zalunfiban dihydrochloride

Cat. No.: HY-119350B

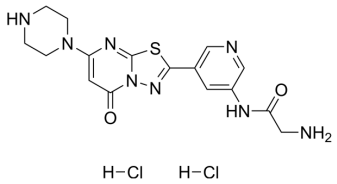
Molecular Formula: $C_{16}H_{20}Cl_2N_8O_2S$

Molecular Weight: 459.35

Target: Integrin

Pathway: Cytoskeleton

Storage: 4°C, sealed storage, away from moisture
* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 6.67 mg/mL (14.52 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.1770 mL	10.8849 mL	21.7699 mL
	5 mM	0.4354 mL	2.1770 mL	4.3540 mL
	10 mM	0.2177 mL	1.0885 mL	2.1770 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: ≥ 0.67 mg/mL (1.46 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 0.67 mg/mL (1.46 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 0.67 mg/mL (1.46 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Zalunfiban (RUC-4) dihydrochloride is a potent, selective platelet αIIbβ3 antagonist (IC_{50}=45 nM). Zalunfiban dihydrochloride can be used for the research of myocardial infarction (MI)[1].

IC_{50} & Target

IC50: 45 nM (αIIbβ3)[1]

In Vivo

Zalunfiban dihydrochloride (1~3.86 mg/kg; s.c.; 24 hours) makes platelet aggregation performed[1].
Zalunfiban dihydrochloride (1~3.86 mg/kg; i.m.; 4.5 hours) leads to the onset of high-grade inhibition of platelet aggregation within 15–30 minutes that lasts from ~2 to >4.5 hours in a dose dependent manner[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Cynomolgus Monkey
Dosage:	1~ 3.86 mg/kg (Pharmacokinetic Analysis)
Administration:	S.c.; 24 hours
Result:	Platelet aggregation was performed.

REFERENCES

[1]. Vootukuri S, et al. Preclinical Studies of RUC-4, a Novel Platelet αIIbβ3 Antagonist, in Non-Human Primates and With Human Platelets. J Clin Transl Sci. 2019;3(2-3):65-74.

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