Fradafiban

Cat. No.: HY-101720

CAS No.: 148396-36-5

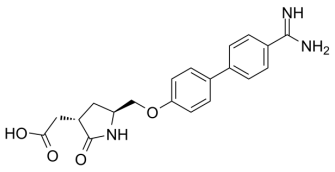
Molecular Formula: $C_{20}H_{21}N_3O_4$

Molecular Weight: 367.4

Target: Integrin

Pathway: Cytoskeleton

Storage: Please store the product under the recommended conditions in the Certificate of Analysis.



SOLVENT & SOLUBILITY

In Vitro

DMSO : 180 mg/mL (489.93 mM; Need ultrasonic)

Preparing Stock Solutions	Concentration / Solvent / Mass	1 mg	5 mg	10 mg
	1 mM	2.7218 mL	13.6091 mL	27.2183 mL
	5 mM	0.5444 mL	2.7218 mL	5.4437 mL
	10 mM	0.2722 mL	1.3609 mL	2.7218 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: ≥ 2.25 mg/mL (6.12 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.25 mg/mL (6.12 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.25 mg/mL (6.12 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Fradafiban is a nonpeptide platelet glycoprotein IIb/IIIa antagonist, which binds to the human platelet GP IIb/IIIa complex with a K_d value of 148 nM.

IC_{50} & Target

Kd: 148 nM (human platelet GP IIb/IIIa complex)[1]

In Vitro

Fradafiban is a nonpeptide mimetic of the arginine-glycine-aspartic acid recognition sequence. Fradafiban binds with high affinity and selectivity to the human platelet GP IIb/IIIa complex and potently inhibits human platelet aggregation in vitro. Fradafiban reversibly binds to the human platelet GP IIb/IIIa complex with a K_d value of 148 nM[1].

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

In Vivo	Fradafiban has only very limited oral activity probably due to its high polarity and thus poor absorption after oral ingestion [1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Müller TH, et al. Profound and sustained inhibition of platelet aggregation by Fradafiban, a nonpeptide platelet glycoprotein IIb/IIIa antagonist, and its orally active prodrug, Lefradafiban, in men. Circulation. 1997 Aug 19;96(4):1130-8.

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