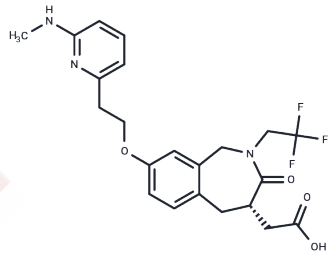
Data Sheet (Cat.No.T6657)

TargetMol

SB273005

Chemical Properties



CAS No. : 205678-31-5

Formula: C22H24F3N3O4

Molecular Weight: 451.44

Storage: Store at low temperature
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	SB273005 is an orally active and potent nonpeptide integrin αvβ3 antagonist that inhibits αvβ3 and αvβ5 and reduces the production of Th2 cells and the cytokine IL-10 in pregnant mice.
Targets(IC50)	Integrin,Interleukin
In vitro	In vitro, SB273005 inhibits human osteoclast-mediated bone resorption with IC50 of 11 nM. [1] In blood containing MDA-MB-231 cells, a combination of SB273005 and lamifiban inhibits tumor cell adhesion to vascular extracellular matrix (ECM). [3]
In vivo	In rat models of bone resorption and osteoporosis, SB273005 (30 mg/kg, p.o.) inhibits the parathyroid hormone-stimulated calcemic response, and inhibits bone loss. [1] In rat with adjuvant-induced arthritis, SB273005 (60 mg/kg, p.o.) significantly reduces the symptoms of adjuvant-induced arthritis. [2] SB273005 (1000 mg/kg/day, p.o.) causes acute, transient necrosis of vascular smooth muscle cell (VSMC) in aorta and renal arteries of mice. [4] In pregnant mice, SB273005 reverses the reduction of Th1 cell-produced IL-2 levels and the increase of Th2 cell-derived IL-10 levels. [5]

Solubility Information

Solubility	H2O: <1 mg/mL, Ethanol: 10 mg/mL (22.15 mM),Sonication is recommended. DMSO: 83 mg/mL (183.86 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: 3.3 mg/mL (7.31 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2151 mL	11.0757 mL	22.1513 mL
5 mM	0.443 mL	2.2151 mL	4.4303 mL
10 mM	0.2215 mL	1.1076 mL	2.2151 mL
50 mM	0.0443 mL	0.2215 mL	0.443 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

Badger AM, et al. Disease-modifying activity of SB 273005, an orally active, nonpeptide alphavbeta3 (vitronectin receptor) antagonist, in rat adjuvant-induced arthritis. Arthritis Rheum. 2001 Jan;44(1):128-37.
Badger AM, et al. Arthritis Rheum. 2001, 44(1), 128-137.
Gomes N, et al. Clin Exp Metastasis. 2004, 21(6), 553-561.
Rehm S, et al. Toxicol Pathol. 2007, 35(7), 958-971.
Wang S, et al. Exp Ther Med. 2014, 7(6), 1677-1682.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481