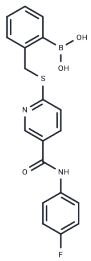
Data Sheet (Cat.No.T28893)

TargetMol

SX-517

Chemical Properties



CAS No. : 1240494-13-6

Formula: C19H16BFN2O3S

Molecular Weight: 382.22

Storage: Keep away from moisture,Keep away from direct sunlight
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	SX-517 is a non-competitive dual antagonist of CXCR1/2, demonstrating anti-inflammatory effects in both PMN cells and mouse models. SX-517 inhibits CXCL-1-induced Ca^{2+} flux (IC_{50} = 38 nM), antagonises CXCL-8-induced [(^{35})S]GTPγS binding (IC_{50} = 60 nM), and suppresses ERK1/2 phosphorylation.
Targets(IC50)	CXCR
In vitro	SX-517 (0.1 nM-0.1 mM; 60 minutes) inhibited 10 nM CXCL8-induced [35S]GTPγS binding with an IC50 of 60 nM [1]. SX-517 (10 μM; 60 minutes) suppressed the cell surface expression of CXCR2 receptors in HEK293 cells [1]. SX-517 (10 μM; 0-30 minutes) blocked CXCR2-mediated ERK1/2 phosphorylation in HEK293 cells [1].
In vivo	SX-517 (0.02 mg/kg and 0.2 mg/kg) was administered via single intravenous injection to male CD1 SWISS mice bearing utetheisa ornatrix air pouches on their backs. The results demonstrated a significant reduction in cell counts within the utetheisa ornatrix air pouches of the mice [1].

Solubility Information

Solubility	DMSO: 80 mg/mL (209.3 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 (8.63 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	2.6163 mL	13.0815 mL	26.1629 mL
5 mM	0.5233 mL	2.6163 mL	5.2326 mL
10 mM	0.2616 mL	1.3081 mL	2.6163 mL
50 mM	0.0523 mL	0.2616 mL	0.5233 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

2-[5-(4-Fluorophenylcarbamoyl)pyridin-2-ylsulfanylmethyl]phenylboronic Acid (SX-517): Noncompetitive Boronic Acid Antagonist of CXCR1 and CXCR2. J Med Chem. 2014 Oct 23;57(20):8378-97.
Ti H, et al. Targeted Treatments for Chronic Obstructive Pulmonary Disease (COPD) Using Low-Molecular-Weight Drugs (LMWDs). J Med Chem. 2019 Jul 11;62(13):5944-5978.