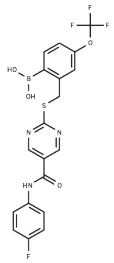
Data Sheet (Cat.No.T8497)

TargetMol

SX-682

Chemical Properties



CAS No. : 1648843-04-2

Formula: C19H14BF4N3O4S

Molecular Weight: 467.2

Storage: Store at low temperature,Keep away from moisture
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-682 is an orally available allosteric inhibitor of CXCR1 and CXCR2 that blocks tumor myeloid suppressor cell recruitment and enhances T cell activation and anti-tumor immunity, with the potential to treat castration-resistant prostate cancer.
Targets(IC50)	CXCR
In vitro	SX-682 significantly inhibits PMN-MDSC trafficking without altering CXCR2 ligand expression; combination with SX-682 enhances tumor growth inhibition or established tumor rejection following programmed death axis (PD-axis) immune checkpoint blockade or adoptive cell transfer of engineered T cells; CXCR1/2 are expressed on tumor cells, but SX-682 appears to have little direct antitumor effect on these cancer cells. [1]
In vivo	**METHODS**: SX-682 (500 mg/kg, oral, one week) was used to treat tumor suppressor model mice injected subcutaneously with MOC2 cells, and PMN-MDSC accumulation was evaluated by flow cytometry. **RESULTS** SX-682 significantly reduced PMN-MDSC trafficking into MOC2 tumors, but SX-682 treatment did not alter the proliferation of tumor PMN-MDSC in tumor-bearing mice. The main mechanism of SX-682 is to inhibit PMN-MDSC trafficking into MOC2 tumors. [2]

Solubility Information

Solubility	DMSO: 130 mg/mL (278.25 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: 5 mg/mL (10.7 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	2.1404 mL	10.7021 mL	21.4041 mL
5 mM	0.4281 mL	2.1404 mL	4.2808 mL
10 mM	0.214 mL	1.0702 mL	2.1404 mL
50 mM	0.0428 mL	0.214 mL	0.4281 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

Sun L, et al. Inhibiting myeloid-derived suppressor cell trafficking enhances T cell immunotherapy. JCI Insight. 2019 Apr 4;4(7):e126853.
Greene S, et al. Inhibition of MDSC Trafficking with SX-682, a CXCR1/2 Inhibitor, Enhances NK-Cell Immunotherapy in Head and Neck Cancer Models. Clin Cancer Res. 2020 Mar 15;26(6):1420-1431.