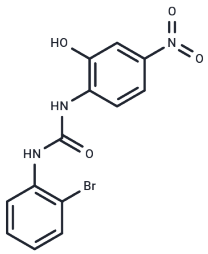
Data Sheet (Cat.No.T1955)

TargetMol

SB225002

Chemical Properties



CAS No. : 182498-32-4

Formula: C13H10BrN3O4

Molecular Weight: 352.14

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	SB225002 is a potent and selective CXCR2 antagonist inhibiting interleukin IL-8 binding to CXCR2.
Targets(IC50)	CXCR
In vitro	SB225002 demonstrates prolonged analgesic effects and reduces TNBS-induced colitis in mouse models. In rabbits, SB225002 selectively inhibits the margination of neutrophils induced by IL-8. Moreover, at a dosage of 1 mg/kg i.p., SB225002 suppresses the growth of subcutaneously transplanted tumors in a mouse model of intrahepatic cholangiocarcinoma.
In vivo	SB225002 demonstrates antitumor activity as a microtubule inhibitor. It significantly reduces the levels of phosphorylated ERK1/2 and decreases the proliferation of WHCO1 cells. In vitro, SB225002 inhibits calcium mobilization stimulated by GROα and effectively suppresses the chemotaxis of human and rabbit neutrophils induced by IL-8 and GROα.
Kinase Assay	Radioligand Binding Experiments: Assays are performed in 96-well microtiter plates where the reaction mixture contains 1.0 μg/ml membrane protein in 20 mM Bis-Tris-propane, pH 8.0, with 1.2 mM MgSO4, 0.1 mM EDTA, 25 mM NaCl, and 0.03% CHAPS and SB 225002 (10 mM stock in Me2SO) added at the indicated concentrations, the final Me2SO concentration is <1% under standard binding conditions. Binding is initiated by addition of 0.25 nM 125I-IL-8 (2,200 Ci/mmol). After 1-h incubation at room temperature the plate is harvested using a Tomtec 96-well harvester onto a glass fiber filtermat blocked with 1% polyethyleneimine, 0.5% BSA and washed three times with 25 mM NaCl, 10 mM Tris·HCl, 1 mM MgSO4, 0.5 mM EDTA, 0.03% CHAPS, pH 7.4. The filter is dried, sealed in a sample bag containing 10 ml of Wallac 205 Betaplate liquid scintillation fluid, and counted with a Wallac 1205 Betaplate liquid scintillation counter.
Cell Research	Three esophageal squamous cell carcinoma cell lines WHCO1, WHCO5, and WHCO6 originally established from surgical biopsies of primary esophageal squamous cell carcinomas are cultured in DMEM containing 10% FCS at 37°C in a humidified atmosphere of 5% CO2. MTT assays are carried out using the Cell Proliferation kit I. Briefly, 1.5 × 103 cells are plated in 96-well plates in a final volume of 180 μL DMEM per well. SB 225002 (antagonist of CXCR2, 400 nM) is added to cells and 0.001% DMSO (solvent) is added as a control. After the indicated incubation period, 18 μL of the MTT labeling reagent (final concentration 0.5 mg/mL) is added to each well and incubated for 4 hours in a humidified atmosphere. One hundred eighty microliters of the

solubilization solution are added to each well and the plates were left overnight at 37°C. The spectrophotometric absorbance of samples is measured at 595 nm using a microtiter plate reader.(Only for Reference)

Solubility Information

Solubility	DMSO: 71.4 mg/mL (202.76 mM),Sonication and heating are recommended. Ethanol: 3 mg/mL (8.51 mM),Heating is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.8398 mL	14.1989 mL	28.3978 mL
5 mM	0.568 mL	2.8398 mL	5.6796 mL
10 mM	0.284 mL	1.4199 mL	2.8398 mL
50 mM	0.0568 mL	0.284 mL	0.568 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.

Reference

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Tel:781-999-4286 E_mail:info@targetmol.com Address:36 Washington Street,Wellesley Hills,MA 02481