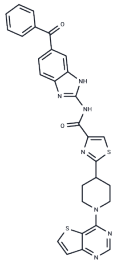
Data Sheet (Cat.No.T6661)

TargetMol

SC75741

Chemical Properties



CAS No. : 913822-46-5

Formula: C29H23N7O2S2

Molecular Weight: 565.67

Appearance: no data available

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

Biological Description

Description	SC75741 is a potent P65 inhibitor with IC50 of 200 nM
Targets(IC50)	NF-κB,Influenza Virus
In vitro	SC75741 shows immunosuppressive activity by inhibiting human PBMC proliferation with IC50 of 2.2 μM. [1] SC75741 inhibits replication of influenza A and B viruses by inhibiting NF-κB-mediated signalling on a transcriptional level. Moreover, SC75741 shows a high barrier for development of resistant virus variants. [2]
In vivo	SC75741 (15 mg/kg i.p.) reduces virus replication and cytokine expression in mice lungs after H5N1 influenza virus infection. [2]
Kinase Assay	NF-κB reporter gene assay: The NF-κB reporter gene assay is prepared with A549-NF-κB-SEAP cell line according to manufacturer's instructions. In short, A549 cells stably transfected with pNF-κB-SEAP reporter gene plasmid are plated and allowed to attach overnight. The cells are subsequently incubated for 5 h with described compounds at 100, 30, 10, 3, 1, 0.3, 0.1, and 0 μM and then stimulated with 10 ng/ml TNF-α for 22 h. The supernatant of the cell is analyzed for SEAP activity using a chemiluminescent SEAP reporter gene assay.
Cell Research	Cell viability assay is prepared using a CellTiter-BluTM Cell Viability Assay. For each concentration of the compound four replicates are measured.(Only for Reference)

Solubility Information

Solubility	H2O: < 1 mg/mL (insoluble or slightly soluble), DMSO: 50 mg/mL (88.39 mM),Sonication is recommended. Ethanol: < 1 mg/mL (insoluble or slightly soluble), (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.7678 mL	8.8391 mL	17.6782 mL
5 mM	0.3536 mL	1.7678 mL	3.5356 mL
10 mM	0.1768 mL	0.8839 mL	1.7678 mL
50 mM	0.0354 mL	0.1768 mL	0.3536 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

Leban J, et al. Bioorg Med Chem Lett. 2007, 17(21), 5858-5862.
Zhou D, Yang S, Yan H, et al. SC75741, a novel c-Abl inhibitor, promotes the clearance of TDP25 aggregates via ATG5-dependent autophagy pathway. Frontiers in Pharmacology. 2021: 2891.
Hu Q, Du H, Ma G, et al. Purification, identification and functional characterization of an immunomodulatory protein from Pleurotus eryngii. Food & Function. 2018, 9(7): 3764-3775
Ehrhardt C, et al. Cell Microbiol. 2013, 15(7), 1198-1211.
Su J, Yin W, Huo M, et al.Induction of apoptosis in glioma cells by lycorine via reactive oxygen species generation and regulation of NF-κB pathways.Naunyn-Schmiedeberg's Archives of Pharmacology.2023: 1-9.
Hu, Qiuhui, Hengjun Du, Gaoxing Ma, Fei Pei, Ning Ma, Biao Yuan, Paul A. Nakata, and Wenjian Yang. Purification, identification and functional characterization of an immunomodulatory protein from Pleurotus eryngii [J]. Food Funct. 2018 Jul 17;9(7):3764-3775.
Geng R, Zhao Y, Xu W, et al.SIRPB1 regulates inflammatory factor expression in the glioma microenvironment via SYK: functional and bioinformatics insights.Journal of Translational Medicine.2024, 22(1): 338
Zheng M, Zhai Y, Yu Y, et al.TNF compromises intestinal bile-acid tolerance dictating colitis progression and limited infliximab response.Cell Metabolism.2024