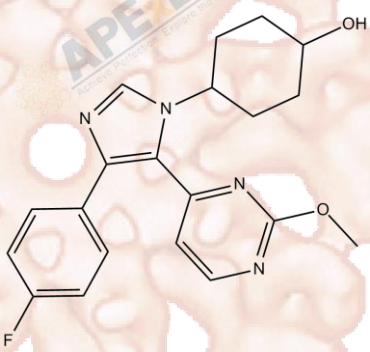
Product Data Sheet

SB 239063



Cat. No.:	A3792
CAS No.:	193551-21-2
Formula:	C20H21FN4O2
M.Wt:	368.4
Synonyms:	SB-239063;SB239063
Target:	MAPK Signaling
Pathway:	p38
Storage:	Store at -20°C

Solvent & Solubility

In Vitro

insoluble in H2O; ⩾18.4 mg/mL in DMSO; ⩾46.8 mg/mL in EtOH with gentle warming and ultrasonic

Preparing Stock Solutions

Mass / Solvent / Concentration	1mg	5mg	10mg
1 mM	2.7144 mL	13.5722 mL	27.1444 mL
5 mM	0.5429 mL	2.7144 mL	5.4289 mL
10 mM	0.2714 mL	1.3572 mL	2.7144 mL

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary	P38 MAP kinase inhibitor
IC_{50} & Target	

In Vitro

Cell Viability Assay

Cell Line:	Human isolated whole blood
Preparation method:	The solubility of this compound in DMSO is > 18.4 mg/mL. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below - 20 °C for several months.
Reacting conditions:	0.01 ~ 10 μM; 4 hrs

	Applications:	In lipopolysaccharide-stimulated human whole blood, SB 239063 concentration-dependently inhibited the production of a series of inflammatory cytokines including IL-1, TNF-α, IL-8 and IL-6, with the IC50 values ranging from 0.02 to 0.09 μM. In contrast, SB 239063 only showed weak inhibition of IL-1ra production, with the IC50 value of ~ 2 μM.
In Vivo	**Animal experiment**	
	Animal models:	A Bleomycin-induced pulmonary fibrosis rat model
	Dosage form:	2.4 or 4.8 mg/day via osmotic pump
	Applications:	In a Bleomycin-induced pulmonary fibrosis rat model, SB 239063 significantly inhibited Bleomycin-induced right ventricular hypertrophy (indicative of secondary pulmonary hypertension), and substantially attenuated Bleomycin-induced lung hydroxyproline synthesis (indicative of collagen synthesis and fibrosis).
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

1. MXinwei Feng1, Junfeng Lu2, et al. "Mycobacterium smegmatis Induces Neurite Outgrowth and Differentiation in an Autophagy-Independent Manner in PC12 and C17.2 Cells." Front. Cell. Infect. Microbiol., 19 June 2018.

See more customer validations on www.apexbt.com.

References

[1]. Underwood D C, Osborn R R, Bochnowicz S, et al. SB 239063, a p38 MAPK inhibitor, reduces neutrophilia, inflammatory cytokines, MMP-9, and fibrosis in lung[J]. American Journal of Physiology-Lung Cellular and Molecular Physiology, 2000, 279(5): L895-L902.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APExBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

APExBIO Technology
www.apexbt.com
7505 Fannin street, Suite 410, Houston, TX 77054.
Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com