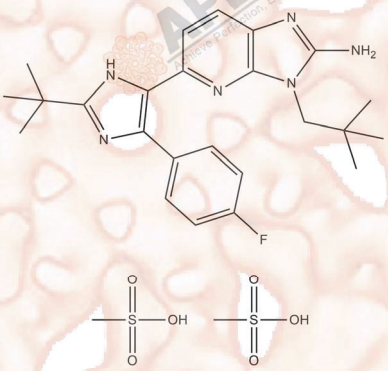
Product Data Sheet

LY2228820

Cat. No.:	A5566
CAS No.:	862507-23-1
Formula:	C24H29FN6·2CH4O3S
M.Wt:	612.74
Synonyms:	
Target:	MAPK Signaling
Pathway:	p38
Storage:	Store at -20°C



Solvent & Solubility

In Vitro

⩾30.65mg/mL in DMSO, ⩾9.9 mg/mL in EtOH with ultrasonic, ⩾45 mg/mL in H2O with ultrasonic

Preparing Stock Solutions

Mass / Solvent / Concentration	1mg	5mg	10mg
1 mM	1.6320 mL	8.1601 mL	16.3201 mL
5 mM	0.3264 mL	1.6320 mL	3.2640 mL
10 mM	0.1632 mL	0.8160 mL	1.6320 mL

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

Biological Activity

Shortsummary	P38 MAP kinase inhibitor
IC_{50} & Target	7 nM (p38α)

In Vitro

Cell Viability Assay

Cell Line:	HeLa cells
Preparation method:	The solubility of this compound in DMSO is > 30.7 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:	9.8 nM-10 μM, 1 h
Applications:	LY2228820 is a potent and selective inhibitor of the α- and β-isoforms of p38

		MAPK with IC50 values of 5.3 and 3.2 nmol/L, respectively. In anisomycin-stimulated HeLa cells, LY2228820 efficiently inhibited phosphorylation of p38α MAPK substrate, MK2 (Thr334). LY2228820 also decreased TNF-α secretion induced by LPS/IFN-γ in mouse peritoneal macrophages.
In Vivo	**Animal experiment**	
	Animal models:	Athymic nude female mice
	Dosage form:	Oral administration, 20 and 40 mg/kg，three times daily
	Applications:	LY2228820 reduced hemoglobin content in athymic nude mice. LY2228820 treatment resulted in a significant reduction of VEGF-A-stimulated vascularization in an ear angiogenesis model, indicating LY2228820 treatment impaired neoangiogenesis.
	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.Jaco I, Annibaldi A,et al. "MK2 Phosphorylates RIPK1 to Prevent TNF-Induced Cell Death." MolCell. 2017 Jun 1;66(5):698-710.e5.PMID:28506461

See more customer validations on www.apexbt.com.

References

[1]. Campbell R M, Anderson B D, Brooks N A, et al. Characterization of LY2228820 dimesylate, a potent and selective inhibitor of p38 MAPK with antitumor activity[J]. Molecular cancer therapeutics, 2014, 13(2): 364-374.

[2]. Tate C M, Blosser W, Wyss L, et al. LY2228820 dimesylate, a selective inhibitor of p38 mitogen-activated protein kinase, reduces angiogenic endothelial cord formation in vitro and in vivo[J]. Journal of Biological Chemistry, 2013, 288(9): 6743-6753.

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.

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