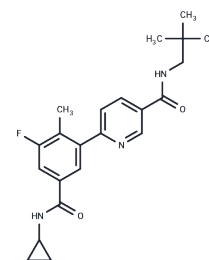


Losmapimod

Chemical Properties

CAS No. :	585543-15-3
Formula:	C ₂₂ H ₂₆ N ₃ O ₂
Molecular Weight:	383.46
Appearance:	no data available
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year



Biological Description

Description	Losmapimod (GSK-AHAB) (GW856553X; SB856553; GSK-AHAB) is a specific, potent, and orally active p38 MAPK inhibitor (pKi: 8.1/7.6 for p38 α / β).
Targets(IC50)	Autophagy,p38 MAPK
Kinase Assay	DNA binding assays: All reactions are performed in black non-binding polystyrene 384-well plates with reaction volumes of 30–100 μ L. Purified DNA strand exchange proteins and chemical compounds are pre-incubated at room temperature for 5 minutes; they are then further incubated at 37°C for 30 min with 100 nM of ssDNA substrate, consisting of a 45-mer poly-dT tagged with Alexa 488 at the 5' terminus (synthesized and purified by Integrated DNA Technologies). Reactions are performed in 20 mM HEPES pH 7.5, 10 mM MgCl ₂ , 0.25 μ M BSA, 2% glycerol, 30 mM NaCl, 4% DMSO and 2 mM ATP. Some conditions included DTT or TCEP (tris(2-carboxyethyl)phosphine) as indicated. DNA binding is measured as a function of fluorescence polarization (FP) with a Safire2 plate reader, using the following settings: excitation 470 \pm 5 nM, emission 530 \pm 5 nM, 10 reads/well, Z height and G factor auto-calibrated from control wells. Displayed error bars represent standard deviation. For experiments involving a titration of protein concentrations, data are fit to an equation that accounts for the cooperative nature by which recombinase proteins bind DNA. For experiments involving a titration of RI-1, protein concentrations are selected to give an ~80% saturation of the FP signal in the absence of RI-1.

Solubility Information

Solubility	H ₂ O: < 1 mg/mL (insoluble or slightly soluble), Ethanol: 39 mg/mL (101.71 mM),Sonication is recommended. DMSO: 18.33 mg/mL (47.81 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6078 mL	13.0392 mL	26.0783 mL
5 mM	0.5216 mL	2.6078 mL	5.2157 mL
10 mM	0.2608 mL	1.3039 mL	2.6078 mL
50 mM	0.0522 mL	0.2608 mL	0.5216 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

Willette RN, et al. J Pharmacol Exp Ther. 2009, 330(3), 964-970.

Zhang X, Yan F, Tang K, et al. Identification of a clinical compound losmapimod that blocks Lassa virus entry. Antiviral Research. 2019 Apr 4;167:68-77

Li M, Wang Z, Fu S, et al. Taurine reduction of injury from neutrophil infiltration ameliorates Streptococcus uberis-induced mastitis. International Immunopharmacology. 2023, 124: 111028.

Zhang X, Yan F, Tang K, et al. Identification of a clinical compound losmapimod that blocks Lassa virus entry[J]. Antiviral Research. 2019 Apr 4;167:68-77.

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