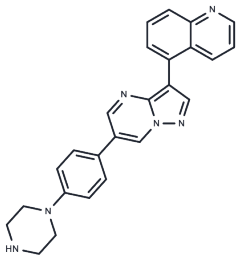
Data Sheet (Cat.No.T1900)

TargetMol

LDN-212854

Chemical Properties



CAS No. : 1432597-26-6

Formula: C25H22N6

Molecular Weight: 406.48

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	LDN-212854 (BMP Inhibitor III), a novel BMP inhibitor, exhibits greater selectivity for BMP versus the TGF-β type I receptors; possesses differences towards ALK2(IC50=1.3 nM) versus ALK1/3 compared to other inhibitors.
Targets(IC50)	ALK,TGF-beta/Smad
In vitro	LDN-212854 (6 mg/kg, i.p.) effectively inactivates ALK2 signaling in vivo and efficiently inhibits ectopic ossification in inducible transgenic ALK2 mice mutants with progressive ankylosis.
In vivo	In C2C12 myoblasts, LDN-212854 demonstrates a higher selectivity for BMP6 over BMP4 in inducing osteogenic differentiation, compared to the osteogenic differentiation induced by BMP6 and BMP4.

Solubility Information

Solubility	DMSO: 10.42 mg/mL (25.63 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4601 mL	12.3007 mL	24.6015 mL
5 mM	0.492 mL	2.4601 mL	4.9203 mL
10 mM	0.246 mL	1.2301 mL	2.4601 mL
50 mM	0.0492 mL	0.246 mL	0.492 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

ACS Chem Biol. 2013, 8(6), 1291-1302.
Yuan Q, Cao S, Dong Q, et al. ALDH2 Activation Inhibited Cardiac Fibroblast-to-Myofibroblast Transformation Via the TGF-β1/Smad Signaling Pathway. Journal of cardiovascular pharmacology. 2019 Apr;73(4): 248-256.
Yuan Q, Cao S, Dong Q, et al. ALDH2 Activation Inhibited Cardiac Fibroblast-to-Myofibroblast Transformation Via the TGF-β1/Smad Signaling Pathway[J]. Journal of cardiovascular pharmacology. 2019 Apr;73(4): 248-256.

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