

LCB 03-0110

Chemical Properties

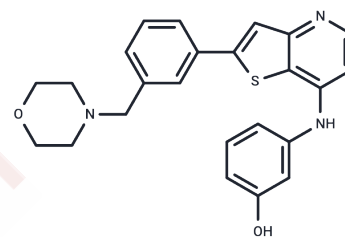
CAS No. : 1228102-01-9

Formula: C₂₄H₂₃N₃O₂S

Molecular Weight: 417.52

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	LCB 03-0110 (3-(2-(3-(Morpholinomethyl)phenyl)thieno[3,2-b]pyridin-7-ylamino)phenol) is a potent inhibitor of discoidin domain receptor family tyrosine kinases and strongly inhibits several tyrosine kinases, including the c-Src family, spleen tyrosine kinase, Bruton's tyrosine kinase, and vascular endothelial growth factor receptor 2, which are important for immune cell signaling and inflammatory reactions.
Targets(IC50)	Discoidin Domain Receptor (DDR),Src
In vitro	In J774A.1 macrophage cells activated by lipopolysaccharide LCB 03-0110 inhibited cell migration and nitric oxide, inducible nitric-oxide synthase, cyclooxygenase 2, and tumor necrosis factor- α synthesis[1].
In vivo	LCB 03-0110 applied topically to full excisional wounds on rabbit ears suppressed the accumulation of myofibroblast and macrophage cells in the healing wound and reduced hypertrophic scar formation after wound closing, without delaying the wound closing process[1].

Solubility Information

Solubility	DMSO: 45 mg/mL (107.78 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	2.3951 mL	11.9755 mL	23.9509 mL
5 mM	0.479 mL	2.3951 mL	4.7902 mL
10 mM	0.2395 mL	1.1975 mL	2.3951 mL
50 mM	0.0479 mL	0.2395 mL	0.479 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

Sun X, et al. LCB 03-0110, a novel pan-discoidin domain receptor/c-Src family tyrosine kinase inhibitor, suppresses scar formation by inhibiting fibroblast and macrophage activation. *J Pharmacol Exp Ther.* 2012 Mar;340(3):510-9.
Jung SH, et al. Topical administration of the pan-Src kinase inhibitors, dasatinib and LCB 03-0110, prevents allergic contact dermatitis in mice. *Br J Dermatol.* 2013 Jan;168(1):112-9.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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