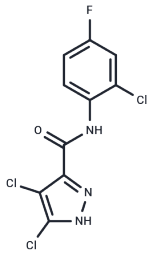
Data Sheet (Cat.No.T37273)

TargetMol

BLX3887

Chemical Properties



CAS No. : 934758-70-0

Formula: C10H5Cl3FN3O

Molecular Weight: 308.52

Storage: Store at low temperature
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	BLX3887 is a highly potent and selective inhibitor of 15-lipoxygenase type 1 (15-LO-1), exhibiting an IC50 of 32 nM in cell-free enzyme assays, with marked selectivity over 15-LO-2, which it does not inhibit, as well as over 5-LO (IC50 = 472 nM) and 12-LO (IC50 = 3,310 nM). BLX3887 selectively suppresses 15-LO metabolite production in eosinophils over neutrophils at 10 μM while additionally inhibiting endocytosis and migration of human peripheral blood mononuclear cell-derived dendritic cells in vitro, highlighting its utility in inflammatory and immune cell signaling research.
Targets(IC50)	Lipoxygenase
In vitro	In functional assays utilizing human granulocytes, BLX3887 acted as a potent and selective inhibitor of 15-Lipoxygenase-1 (15-LOX-1), exhibiting an IC50 of 0.37 μM [1].

Solubility Information

Solubility	DMF: 15 mg/mL (48.62 mM),Sonication is recommended. DMSO: 8 mg/mL (25.93 mM),Sonication is recommended. PBS (pH 7.2)(1:5): < 1 mg/mL (insoluble) DMSO:PBS (pH 7.2) (1:5): 0.16 mg/mL (0.52 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.2413 mL	16.2064 mL	32.4128 mL
5 mM	0.6483 mL	3.2413 mL	6.4826 mL
10 mM	0.3241 mL	1.6206 mL	3.2413 mL
50 mM	0.0648 mL	0.3241 mL	0.6483 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

Archambault, et al. Comparison of eight 15-lipoxygenase (LO) inhibitors on the biosynthesis of 15-LO metabolites by human neutrophils and eosinophils. PLoS One 13(8), e0202424 (2018).