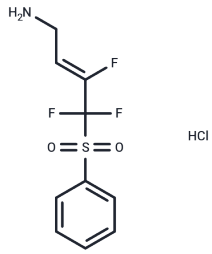
Data Sheet (Cat.No.T60438L)

TargetMol

PXS-6302 hydrochloride

Chemical Properties



CAS No. : 2584947-79-3

Formula: C10H11ClF3NO2S

Molecular Weight: 301.71

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	PXS-6302 hydrochloride is a potent irreversible lysine oxidase (LOX) inhibitor, inhibiting Bovine LOX, rh LOXL1, rh LOXL2, rh LOXL3, and rh LOXL4 with IC50 of 3.7 μM, 3.4 μM, 0.4 μM, 1.5 μM, and 0.3 μM, respectively. PXS-6302 hydrochloride penetrates easily through the skin and is able to reduce collagen accumulation, significantly improving the appearance of scars.
Targets(IC50)	Lipoxygenase,Monoamine Oxidase
In vitro	PXS-6302 hydrochloride exhibits high permeability in monolayer cells, such as Caco-2 or MDCKII cells[1].
In vivo	PXS-6302 hydrochloride inhibits LOX, reduces cross-linking, and improves the appearance of scars in porcine excision and burn models[1]. In a mouse injury model, topical application of PXS-6302 hydrochloride (1.5%, water-in-oil cream; 500 mg cream applied to 16 cm2; topical; once daily for 28 days) reduces collagen deposition and cross-linked proteins in the fibrotic tissue[1]. Additionally, PXS-6302 hydrochloride (0.5%, 1.5%, or 3%, water-in-oil ointment; 400 mg ointment applied to 16 cm2; topical; once daily for 12 weeks) significantly improves the appearance of scars without reducing tissue strength in a porcine injury model under local application[1].

Solubility Information

Solubility	DMSO: 50 mg/mL (165.72 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween-80+45% Saline: 1.67 mg/mL (5.54 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.3144 mL	16.5722 mL	33.1444 mL
5 mM	0.6629 mL	3.3144 mL	6.6289 mL
10 mM	0.3314 mL	1.6572 mL	3.3144 mL
50 mM	0.0663 mL	0.3314 mL	0.6629 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

Chaudhari N, et al. Topical application of an irreversible small molecule inhibitor of lysyl oxidases ameliorates skin scarring and fibrosis. Nat Commun. 2022 Sep 22;13(1):5555.