

PXS-5153A

Chemical Properties

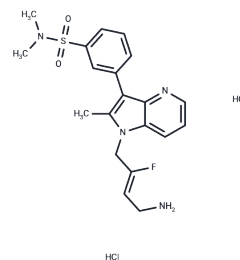
CAS No. : 2125956-82-1

Formula: C₂₀H₂₅Cl₂FN₄O₂S

Molecular Weight: 475.41

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	PXS-5153A is an effective, selective, and fast-acting inhibitor of lysyl oxidase like 2/3 enzymes with enzymatic activity almost entirely blocked within 15 minutes. PXS-5153A could reduce crosslinks and ameliorates fibrosis.
Targets(IC50)	Monoamine Oxidase
In vitro	PXS-5153A is >40-fold selective for LOXL2 over both LOX and LOXL1 and >700-fold selective over other related amine oxidases. PXS-5153A exhibits an IC ₅₀ of <40 nM for LOXL2 across all mammalian species tested. PXS-5153A also inhibits human LOXL3 with an IC ₅₀ value of 63 nM[1].
In vivo	rhLOXL2 dose-dependently induces oxidation of collagen with PXS-5153A dose-dependently impeding collagen oxidation. Therapeutic treatment of PXS-5153A substantially reduces immature crosslink formation compared with the CCl ₄ treated animals. Mature crosslink formation is also reduced by PXS-5153A treatment. All groups with therapeutic treatment of PXS-5153A show a significant reduction in DHLNL formation and HYP compared to the CCl ₄ treated animals[1].

Solubility Information

Solubility	H ₂ O: 20 mg/mL (42.07 mM),Sonication is recommended. DMSO: 45 mg/mL (94.66 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	2.1034 mL	10.5172 mL	21.0345 mL
5 mM	0.4207 mL	2.1034 mL	4.2069 mL
10 mM	0.2103 mL	1.0517 mL	2.1034 mL
50 mM	0.0421 mL	0.2103 mL	0.4207 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

Schilter H, et al. The lysyl oxidase like 2/3 enzymatic inhibitor, PXS-5153A, reduces crosslinks and ameliorates fibrosis. J Cell Mol Med. 2018 Dec 9.

Xie Y, Yang F, He L, et al. Single-cell dissection of the human blood-brain barrier and glioma blood-tumor barrier. Neuron.2024

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481