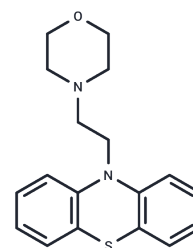


LSD1-IN-24

Chemical Properties

CAS No. :	4734-59-2
Formula:	C ₁₈ H ₂₀ N ₂ O ₂ S
Molecular Weight:	312.43
Storage:	Store at low temperature Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



Biological Description

Description	LSD1-IN-24 is a selective and potent LSD1 inhibitor with an IC ₅₀ value of 0.247 μM. LSD1-IN-24 induces PD-L1 expression and enhances the T cell killing response, and can be used in cancer-related diseases.
Targets(IC ₅₀)	Histone Demethylase, PD-1/PD-L1
In vitro	LSD1-IN-24 (compound 3S) (0-20 μM, 5 days) can dose-dependently reduce PD-L1 levels in an LSD1-dependent manner and enhance T-cell cytotoxicity against BGC-823 cells. It does not affect the proliferation of BGC-823 and MFC cells. Additionally, it can dose-dependently protect H3K4me _{1/2} from demethylation but cannot protect H3K4me ₃ [1].
In vivo	In a subcutaneous tumor model containing MFC cells, LSD1-IN-24 (compound 3S) (0-50 mg/kg, oral gavage; daily for 2 weeks) dose-dependently inhibits the in vivo growth of MFC cells. The tumor weight significantly decreases, Ki67 expression in tumor tissues markedly decreases, and there is no apparent toxicity observed in mice[1].

Solubility Information

Solubility	DMSO: 50 mg/mL (160.04 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: 2 mg/mL (6.4 mM), Sonication is recommended. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.2007 mL	16.0036 mL	32.0072 mL
5 mM	0.6401 mL	3.2007 mL	6.4014 mL
10 mM	0.3201 mL	1.6004 mL	3.2007 mL
50 mM	0.064 mL	0.3201 mL	0.6401 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

Xing-Jie Dai, et al. Phenothiazine-Based LSD1 Inhibitor Promotes T-Cell Killing Response of Gastric Cancer Cells. *J Med Chem.* 2023 Mar 23;66(6):3896-3916.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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