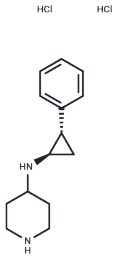
Data Sheet (Cat.No.T2315)

TargetMol

GSK-LSD1 dihydrochloride

Chemical Properties



CAS No. : 2102933-95-7

Formula: C14H22Cl2N2

Molecular Weight: 289.24

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	GSK-LSD1 dihydrochloride (GSK-LSD1 2HCl) is a specificity irreversible LSD1 inhibitor (IC50: 16 nM). The selectivity of GSK-LSD1 for LSD1 is >1000 fold over other closely related FAD utilizing enzymes (i.e. MAO-A, LSD2, MAO-B).
Targets(IC50)	Histone Demethylase,Monoamine Oxidase
In vitro	GSK-LSD1 induces gene expression changes in cancer cell lines with average EC50 of < 5 nM and inhibits cancer cell line growth with average EC50 of < 5 nM. [1]

Solubility Information

Solubility	DMSO: 25 mg/mL (86.43 mM),Sonication is recommended. H2O: 50 mg/mL (172.87 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 (6.91 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	3.4573 mL	17.2867 mL	34.5734 mL
5 mM	0.6915 mL	3.4573 mL	6.9147 mL
10 mM	0.3457 mL	1.7287 mL	3.4573 mL
50 mM	0.0691 mL	0.3457 mL	0.6915 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

Structural Genomics Consortium.
Wang L, Wu J, Sramek M, et al.Heterogeneous enhancer states orchestrate β cell responses to metabolic stress. Nature Communications.2024, 15(1): 9361.