

Lysine-specific Demethylase Inhibitor (1C) (hydrochloride)

Chemical Properties

CAS No. :	1234494-75-7
Formula:	C ₁₅ H ₄₀ Cl ₄ N ₈
Molecular Weight:	474.34
Storage:	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	Lysine-specific demethylase inhibitor (1C) (LSD inhibitor (1C)) is an inhibitor of LSD1, a repressive demethylase selective for histone H3 lysine 4 (H3K4). 1,2LSD inhibitor (1C) inhibits LSD1 activity by 85.9% when used at a concentration of 10 μM. It increases the level of H3K4 methylation, including H3K4me1 and H3K4me2 but not H3K9me2 levels, in HCT116 human colon carcinoma cells. 2LSD inhibitor (1C) also induces re-expression of the Wnt signaling pathway proteins secreted frizzled-related protein 1 (SFRP1), SFRP4, and SFRP5, as well as the transcription factor GATA5, which are aberrantly silenced in HCT116 cells.
Targets(IC50)	Others

Solubility Information

Solubility	DMSO: Soluble H ₂ O: 50 mg/mL (105.41 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	2.1082 mL	10.541 mL	21.0819 mL
5 mM	0.4216 mL	2.1082 mL	4.2164 mL
10 mM	0.2108 mL	1.0541 mL	2.1082 mL
50 mM	0.0422 mL	0.2108 mL	0.4216 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

Sharma, S.K., Wu, Y., Steinbergs, N., et al.(Bis)urea and (bis)thiourea inhibitors of lysine-specific demethylase 1 as epigenetic modulatorsJ. Med. Chem.53(14)5197-5212(2010)

Huang, Y., Greene, E., Murray Stewart, T., et al.Inhibition of lysine-specific demethylase 1 by polyamine analogues results in reexpression of aberrantly silenced genesProc. Natl. Acad. Sci. U.S.A.104(19)8023-8028(2007)

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