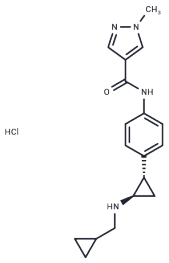
Data Sheet (Cat.No.T13055)

TargetMol
YOUR TARGET MOLECULES

T-3775440 hydrochloride

Chemical Properties



CAS No. : 1422535-52-1

Formula: C18H23ClN4O

Molecular Weight: 346.85

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	T-3775440 hydrochloride is an irreversible inhibitor of lysine-specific histone demethylase (LSD1)(IC50 : 2.1 nM).
Targets(IC50)	Histone Demethylase
In vitro	T-3775440, a novel irreversible LSD1 inhibitor. Cell growth analysis of leukemia cell lines revealed that acute erythroid leukemia (AEL) and acute megakaryoblastic leukemia cells (AMKL) were highly sensitive to this compound. T-3775440 treatment enforced transdifferentiation of erythroid/megakaryocytic lineages into granulomonocytic-like lineage cells. Mechanistically, T-3775440 disrupted the interaction between LSD1 and growth factor-independent 1B (GFI1B), a transcription factor critical for the differentiation processes of erythroid and megakaryocytic lineage cells. Knockdown of LSD1 and GFI1B recapitulated T-3775440-induced transdifferentiation and cell growth suppression, highlighting the significance of LSD1-GFI1B axis inhibition with regard to the anti-AML effects of T-3775440[1].
In vivo	T-3775440 exhibited significant antitumor efficacy in AEL and AMKL xenograft models[1].

Solubility Information

Solubility	DMSO: 30.18 mg/mL (87.01 mM), (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.8831 mL	14.4155 mL	28.8309 mL
5 mM	0.5766 mL	2.8831 mL	5.7662 mL
10 mM	0.2883 mL	1.4415 mL	2.8831 mL
50 mM	0.0577 mL	0.2883 mL	0.5766 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.

Reference

Ishikawa Y, et al. A Novel LSD1 Inhibitor T-3775440 Disrupts GFI1B-Containing Complex Leading to Transdifferentiation and Impaired Growth of AML Cells. Mol Cancer Ther. 2017 Feb;16(2):273-284.