

KDM2/7-IN-1

Chemical Properties

CAS No. : 1453071-47-0

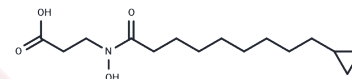
Formula: C₁₅H₂₇N₁O₄

Molecular Weight: 285.38

Store at low temperature

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	KDM2/7-IN-1 (TC-E 5002) is a selective small-molecule inhibitor of the KDM2/7 histone demethylase subfamily, exhibiting IC ₅₀ values of 0.2, 1.2, 6.8, 55, 83, >100, and >120 μM for KDM7A, KDM7B, KDM2A, KDM5A, KDM4C, KDM6A, and KDM4A, respectively. KDM2/7-IN-1 inhibits the proliferation of HeLa and KYSE-150 cancer cells in vitro, highlighting its utility in epigenetic and oncology research.
Targets(IC ₅₀)	Histone Demethylase
In vitro	KDM2/7-IN-1 exhibits anti-proliferative activity in N2a cells with a GI ₅₀ value of 86 μM [1]. In HeLa and KYSE150 cells, KDM2/7-IN-1 significantly inhibits cell growth and is associated with elevated H3K27me ₂ levels [1]. After KDM2/7-IN-1 treatment, the expression of the E2F1 gene in HeLa cells markedly decreases, and the cell cycle arrests at the G ₀ /G ₁ phase [1].

Solubility Information

Solubility	DMSO: 24 mg/mL (84.1 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	3.5041 mL	17.5205 mL	35.041 mL
5 mM	0.7008 mL	3.5041 mL	7.0082 mL
10 mM	0.3504 mL	1.752 mL	3.5041 mL
50 mM	0.0701 mL	0.3504 mL	0.7008 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

Suzuki T, et al. Identification of the KDM2/7 histone lysine demethylase subfamily inhibitor and its antiproliferative activity. *J Med Chem.* 2013 Sep 26;56(18):7222-31.

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