

HDAC-IN-42

Chemical Properties

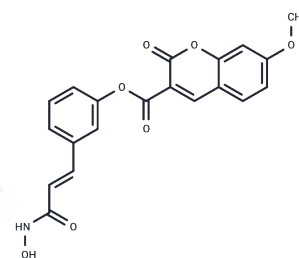
CAS No. : 2454024-18-9

Formula: C₂₀H₁₅NO₇

Molecular Weight: 381.34

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	HDAC-IN-42 (compound 14f) is a highly potent and selective inhibitor of histone deacetylase (HDAC) enzymes, with IC ₅₀ values of 0.19 μM for HDAC1 and 4.98 μM for HDAC6. It exhibits significant anticancer properties, inhibiting cell proliferation, inducing apoptosis, and causing cell cycle arrest specifically at the G2/M phase [1].
Targets(IC50)	Apoptosis,Others,HDAC
In vitro	HDAC-IN-42 (compound 14f) demonstrates anti-proliferative effects on various cancer cell lines, with C ₅₀ s of 9.56 μM for MCF-7, 13.32 μM for HCT-116, 10.46 μM for HepG2, and 6.91 μM for HeLa cells. At 1, 5, and 10 μM over 24 hours, it reduces colony formation in HeLa cells and increases histone H3 and α-tubulin expression, indicating effects on cell structure and genetic material packaging. HDAC-IN-42 induces apoptosis and arrests the cell cycle at the G2/M phase after 48 hours, highlighting its potential as a targeted therapeutic agent [1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6223 mL	13.1117 mL	26.2233 mL
5 mM	0.5245 mL	2.6223 mL	5.2447 mL
10 mM	0.2622 mL	1.3112 mL	2.6223 mL
50 mM	0.0524 mL	0.2622 mL	0.5245 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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