

HDAC-IN-52

Chemical Properties

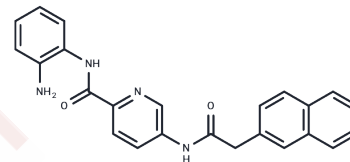
CAS No. : 2075787-77-6

Formula: C₂₄H₂₀N₄O₂

Molecular Weight: 396.44

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-52, a pyridine-containing HDAC inhibitor, effectively inhibits HDAC1, HDAC2, HDAC3, and HDAC10 with IC ₅₀ values of 0.189, 0.227, 0.440, and 0.446 μM, respectively. HDAC-IN-52 can be used in cancer research.
Targets(IC ₅₀)	HDAC
In vitro	HDAC-IN-52 (72 h) inhibited the proliferation of HCT116, A549 and K562 cells with IC ₅₀ values of 0.43, 1.28 and 0.37 μM, respectively.[1]. HDAC-IN-52 (1-5 μM ; 24-48 h) significantly induced cell death in leukemic U937 cells after 48 h, with 76% and 100% G1 prophase blockade, respectively.[1] HDAC-IN-52 (1-5 μM ; 48 h) increased mRNA expression of p21, BAX and BAK and downregulated cyclin D1 and BCL-2.[1]

Solubility Information

Solubility	DMSO: 25 mg/mL (63.06 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	-------------------------------------------------------------------------------------------------------------------------

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.5224 mL	12.6122 mL	25.2245 mL
5 mM	0.5045 mL	2.5224 mL	5.0449 mL
10 mM	0.2522 mL	1.2612 mL	2.5224 mL
50 mM	0.0504 mL	0.2522 mL	0.5045 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

Di Bello E, et al. Novel pyridine-containing histone deacetylase inhibitors strongly arrest proliferation, induce apoptosis and modulate miRNAs in cancer cells. Eur J Med Chem. 2023 ; 247:115022.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481