Product Data Sheet

HDAC-IN-52

 Cat. No.:
 HY-152174

 CAS No.:
 2075787-77-6

 Molecular Formula:
 $C_{24}H_{20}N_4O_2$

 Molecular Weight:
 396.44

Molecular Weight: 396.44

Target: HDAC

Pathway: Cell Cycle/DNA Damage; Epigenetics

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

BIOLOGICAL ACTIVITY

Description	HDAC-IN-52 is a pyridine-containing HDAC inhibitor, with IC $_{50}$ s of 0.189, 0.227, 0.440 and 0.446 μ M for HDAC1, HDAC2, HDAC3 , and HDAC10, respectively. HDAC-IN-52 can be used for the research of cancer ^[1] .			
IC ₅₀ & Target	hHDAC1 0.189 μM (IC ₅₀)	hHDAC2 0.227 μM (IC ₅₀)	hHDAC3 0.440 μM (IC ₅₀)	hHDAC10 0.446 μM (IC ₅₀)
In Vitro	HDAC-IN-52 (compound 8f) (72 hours) inhibits the proliferation of HCT116, A549 and K562 cells, with IC ₅₀ s of 0.43, 1.28, and 0.37 μM, respectively ^[1] . HDAC-IN-52 (1-5 μM; 24-48 h) induces remarkable leukaemia U937 cell death after 48 h, with 76% and 100% pre-G1 phase arrest, respectively ^[1] . HDAC-IN-52 (1-5 μM; 48 h) increases mRNA expression of p21, BAX and BAK, downregulated cyclin D1 and BCL-2 ^[1] .			

REFERENCES

[1]. Bello ED, et, al. Novel pyridine-containing histone deacetylase inhibitors strongly arrest proliferation, induce apoptosis and modulate miRNAs in cancer cells. Eur J Med Chem. 2022 Dec 15;247:115022.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA