HDAC6-IN-14

Cat. No.: HY-151896

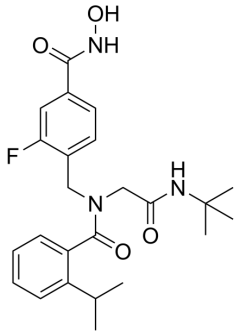
Molecular Formula: $C_{24}H_{30}FN_3O_4$

Molecular Weight: 443.51

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

HDAC6-IN-14 is a highly selective HDAC6 (HDAC) inhibitor with an IC_{50} of 42 nM. HDAC6-IN-14 displays >100-fold selectivity over HDAC1/HDAC2/HDAC3/HDAC4[1].

IC_{50} & Target

HDAC6	HDAC1	HDAC2	HDAC3
42 nM (IC_{50})	8.01 μM (IC_{50})	4.48 μM (IC_{50})	8.35 μM (IC_{50})

HDAC4
>10 μM (IC_{50})

In Vitro

HDAC6-IN-14 (compound 10p; 1-5 μM; 48 h) treatment results in a significant apoptosis induction in HL60 cells[1].
HDAC6-IN-14 (compound 10p; 6-36 μM; 24 h) treatment induces acetylation of α-tubulin but has no effect on Ac-H3 levels even at concentrations of ≤36 μM in HL60 cells[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Apoptosis Analysis[1]

Cell Line:	HL60 cells
Concentration:	1 μM and 5 μM
Incubation Time:	48 h
Result:	Resulted in a significant apoptosis induction.

Western Blot Analysis[1]

Cell Line:	HL60 cells
Concentration:	6 μM, 12 μM, 24 μM, 36 μM
Incubation Time:	24 h
Result:	Induced acetylation of α-tubulin but had no effect on Ac-H3 levels.

REFERENCES

[1]. Nina Reßing, et al. Development of Fluorinated Peptoid-Based Histone Deacetylase (HDAC) Inhibitors for Therapy-Resistant Acute Leukemia. J Med Chem. 2022 Nov 24;65(22):15457-15472.

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