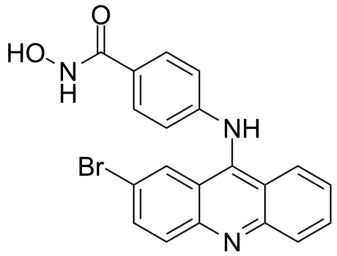
HDAC6-IN-5

Cat. No.:	HY-146678
CAS No.:	2413603-15-1
Molecular Formula:	$C_{20}H_{14}BrN_3O_2$
Molecular Weight:	408.25
Target:	HDAC; Amyloid-β; Cholinesterase (ChE)
Pathway:	Cell Cycle/DNA Damage; Epigenetics; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	HDAC6-IN-5 (compound 11b) is a potent and BBB-penetrated HDAC6 inhibitor, with an IC_{50} of 0.025 μM. HDAC6-IN-5 exhibits strong inhibitory activity against $A\beta_{1-42}$ self-aggregation and AChE, with IC_{50} values of 3.0 and 0.72 μM. HDAC6-IN-5 can enhance neurite outgrowth without significant neurotoxicity[1].

IC_{50} & Target

AChE 0.72 μM (IC_{50})	HDAC6 0.026 ± 0. μM (IC_{50})	HDAC1 0.09 ± 0.0 μM (IC_{50})	HDAC 0.16 ± 0.0 μM (IC_{50})
HDAC3 0.33 ± 0. μM (IC_{50})	HDAC2 0.48 ± 0.0 μM (IC_{50})	HDAC9 5.51 ± 0.0 μM (IC_{50})	HDAC5 7.19 ± 0.4 μM (IC_{50})
HDAC4 7.85 ± 0.6 μM (IC_{50})	HDAC7 9.13 ± 0.3 μM (IC_{50})		

In Vitro	HDAC6-IN-5 (compound 11b) induces histone H3 and α-tubulin acetylation in a dose-dependent manner, with EC_{50} values of 0.58 and 8 μM, respectively[1] MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Tseng HJ, et al. Synthesis and biological evaluation of acridine-based histone deacetylase inhibitors as multitarget agents against Alzheimer's disease. Eur J Med Chem. 2020 Apr 15;192:112193.

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