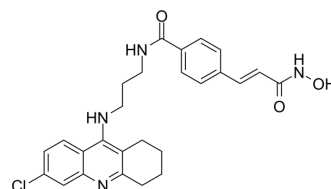


AChE/HDAC-IN-1

Cat. No.:	HY-147962
CAS No.:	2414053-06-6
Molecular Formula:	C ₂₆ H ₂₇ ClN ₄ O ₃
Molecular Weight:	478.97
Target:	AChE; HDAC
Pathway:	Neuronal Signaling; Cell Cycle/DNA Damage; Epigenetics
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	COX-2-IN-23 (compound A10) is a potent both AChE and HDAC inhibitor with IC ₅₀ values of 0.12 and 0.23 nM. COX-2-IN-23 exhibits antioxidant activity and metal chelating properties. COX-2-IN-23 can be used in alzheimer's disease research ^[1] .
IC₅₀ & Target	HDAC 0.23 nM (IC ₅₀)
In Vitro	COX-2-IN-23 (compound A10) is a potent dual AChE and HDAC inhibitor with IC ₅₀ values of 0.12, 361.52, 0.23 and 9050 nM for AChE, BChE, HDAC and ABTS, respectively ^[1] . COX-2-IN-23 (compound A10) has antioxidant activity and exhibits inhibitory activity on Aβ ₁₋₄₂ self-aggregation (34.2%) as well as disaggregation activity on pre-formed Aβ fibrils (41.24%) ^[1] . COX-2-IN-23 (compound A10) exhibits Cu ²⁺ chelating properties, promoting the amyloid protein aggregation leads to aggravating the neurotoxicity ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Xu A, et al. Tacrine-hydroxamate derivatives as multitarget-directed ligands for the treatment of Alzheimer's disease: Design, synthesis, and biological evaluation. Bioorg Chem. 2020 May;98:103721.

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

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