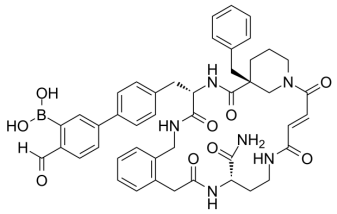
CypE-IN-1

Cat. No.:	HY-151489
CAS No.:	3023438-33-4
Molecular Formula:	$C_{46}H_{49}BN_6O_9$
Molecular Weight:	840.73
Target:	Sirtuin
Pathway:	Cell Cycle/DNA Damage; Epigenetics
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	CypD-IN-1 is a potent and subtype-selective cyclophilin E (CypE) inhibitor. CypD-IN-1 has CypE affinity with IC_{50} and K_i values of 0.013 μM and 0.072 μM, respectively. CypD-IN-1 can be used for the research of several diseases including oxidative stress, neurodegenerative disorders, liver diseases, aging, autophagy and diabetes[1].
IC_{50} & Target	IC50: 0.52 μM (CypD); 1.8 μM (CypA); 5.6 μM (CypB); 0.072 μM (CypE); 0.03 μM (CypE K212A); 2 μM (CypE K217A); 0.019 μM (CypE K218A)[1] IC50: 0.6 μM (CypD); 3 μM (CypA); 4 μM (CypB); 0.013 μM (CypE); 17 μM (CypC); 40 μM (CypG)[1]
In Vitro	CypD-IN-1 (C3A) has selectivity for CypD, CypA, CypB and CypE with K_i values of 0.52 μM, 1.8 μM, 5.6 μM and 0.072 μM, respectively[1]. CypD-IN-1 has inhibitory activity for CypD, CypA, CypB, CypE, CypC and CypG with IC_{50} values of 0.6 μM, 3 μM, 4 μM, 0.013 μM, 17 μM and 40 μM, respectively[1]. CypD-IN-1 has binding and inhibition potency for CypE K212A, K217A and K218A mutants with IC_{50} values of 0.03 μM, 2 μM and 0.019 μM, respectively[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Alexander A Peterson, et al. Discovery and molecular basis of subtype-selective cyclophilin inhibitors. Nat Chem Biol. 2022 Sep 26.

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