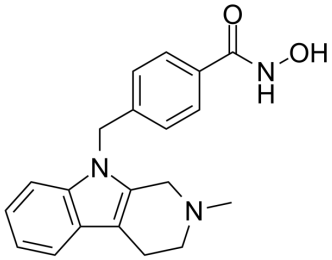
HDAC-IN-4

Cat. No.:	HY-128763
CAS No.:	1252003-13-6
Molecular Formula:	$C_{20}H_{21}N_3O_2$
Molecular Weight:	335.4
Target:	HDAC
Pathway:	Cell Cycle/DNA Damage; Epigenetics
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 6 months -20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 50 mg/mL (149.08 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.9815 mL	14.9076 mL	29.8151 mL
	5 mM	0.5963 mL	2.9815 mL	5.9630 mL
	10 mM	0.2982 mL	1.4908 mL	2.9815 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (7.45 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (7.45 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (7.45 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

HDAC-IN-4 is a selective HDAC6 and HDAC10 inhibitor with pIC_{50}s of 7.2 and 6.8 in BRET assay, respectively. Antitumoral activity[1].

IC_{50} & Target

pIC50: 7.2 (HDAC6), and 6.8 (HDAC10)[1]

In Vitro

HDAC-IN-4 inhibits HDAC1, HDAC2, HDAC3, HDAC8 and HDAC10 with pIC_{50}s of 5.5, 4.6, 5.4, 5.4, 6.7 in FRET assay, respectively [1].

HDAC-IN-4 is more potent against HDAC6 than Tubastatin A, suggests that HDAC-IN-4 may be a better HDAC6 probe than Tubastatin A[1].

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

REFERENCES

[1]. Géraldy M, et al. Selective Inhibition of Histone Deacetylase 10: Hydrogen Bonding to the Gatekeeper Residue is Implicated. J Med Chem. 2019 May 9;62(9):4426-4443.

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