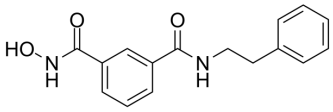
BRD73954

Cat. No.:	HY-18700
CAS No.:	1440209-96-0
Molecular Formula:	$C_{16}H_{16}N_2O_3$
Molecular Weight:	284.31
Target:	HDAC
Pathway:	Cell Cycle/DNA Damage; Epigenetics
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 2 years -20°C 1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 25 mg/mL (87.93 mM; Need ultrasonic)

Preparing Stock Solutions

Concentration \ Solvent \ Mass	1 mg	5 mg	10 mg
1 mM	3.5173 mL	17.5864 mL	35.1729 mL
5 mM	0.7035 mL	3.5173 mL	7.0346 mL
10 mM	0.3517 mL	1.7586 mL	3.5173 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 (8.79 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (8.79 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (8.79 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

BRD73954 is a potent HDAC inhibitor and selectively inhibiting both HDAC6 and HDAC8 with IC_{50} values of 0.0036, 0.12, 9, 12, 23 μM for HDAC6, HDAC8, HDAC2, HDAC1 and HDAC3, respectively. BRD73954 decreases the levels of HDAC6, associated with upregulation of Ac-Tubulin[1].

IC_{50} & Target			
	HDAC6	HDAC8	HDAC2
	0.036 μM (IC_{50})	0.12 μM (IC_{50})	9 μM (IC_{50})

In Vitro

BRD73954 (10 μM; 48 h; HeLa cells) inhibits HDAC6 activity via upregulation of Ac-Tubulin[1].

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

Western Blot Analysis[1]

Cell Line:	HeLa cells
Concentration:	10 μM
Incubation Time:	48 hours
Result:	Increased inα-tubulin acetylation, no change in the acetylation state of H3 was observed.

CUSTOMER VALIDATION

- Acta Pharmacol Sin. 2021 Apr 13.
- J Mol Med (Berl). 2019 Aug;97(8):1183-1193.
- Patent. US20180263995A1.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Olson DE, et, al. Discovery of the first histone deacetylase 6/8 dual inhibitors. J Med Chem. 2013 Jun 13;56(11):4816-20.

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