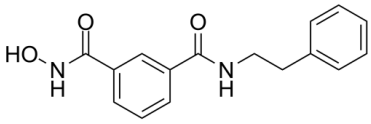
Data Sheet

Product Name:	BRD73954
Cat. No.:	CS-4973
CAS No.:	1440209-96-0
Molecular Formula:	C16H16N2O3
Molecular Weight:	284.31
Target:	HDAC
Pathway:	Cell Cycle/DNA Damage; Epigenetics
Solubility:	DMSO : 25 mg/mL (87.93 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

BRD73954 ia a potent and selective HDAC inhibitor with IC50 of 36 nM and 120 nM for HDAC6 and HDAC8, respectively. IC50 value: 36 nM (HDAC6), 120 nM (HDAC8) Target: HDAC BRD73954 is the first small molecule histone deacetylase (HDAC) inhibitor, capable of potently and selectively inhibiting both HDAC6 and HDAC8, despite the fact that these isoforms belong to distinct phylogenetic classes within the HDAC family of enzymes. Our data demonstrate that meta substituents of phenyl hydroxamic acids are readily accommodated upon binding to HDAC6 and, furthermore, are necessary for the potent inhibition of HDAC8. At 10 M, BRD73954 treatment results in a robust increase in acetylation of α-tubulin, a known HDAC6 substrate, but not histone H3, a substrate for HDAC1, 2, and 3, in HeLa cells.

References:

[1]. Olson DE, et al. Discovery of the first histone deacetylase 6/8 dual inhibitors. J Med Chem. 2013 Jun 13;56(11):4816-4820.

CAIndexNames:

1,3-Benzenedicarboxamide, N1-hydroxy-N3-(2-phenylethyl)-

SMILES:

O=C(C1=CC=CC(C(NCCC2=CC=CC=C2)=O)=C1)NO

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