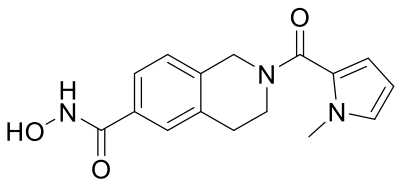
MPI_5a

SYN-3040



N-hydroxy-2-(1-methyl-1H-pyrrole-2-carbonyl)-1,2,3,4-tetrahydroisoquinoline-6-carboxamide

CAS Registry No.: 1259296-46-2

Smiles String:
O=C(NO)C1=CC(CCN(C(C2=CC=CN2C)=O)C3)=C3C=C1

Molecular Weight: 299.33

Molecular Formula: C16H17N3O3

Lot Number: Refer to vial

1H-NMR: Available on request

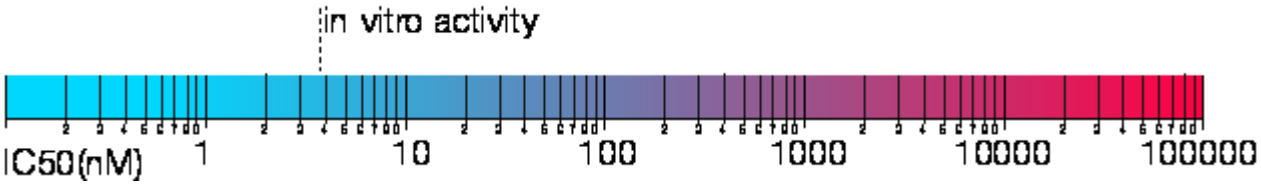
HPLC (Purity): > 95.0% @ 254 nm

ES-MS: Available on request

Description:

MPI_5a is a potent selective inhibitor of HDAC6, and poorly blocks other HDAC enzymes. HDAC6 is a predominantly cytoplasmic enzyme that targets α-tubulin, cortactin, and heat shock protein 90, and other substrates. MPI-5a has an IC50 of 36 nM in tumour cell models and inhibits the acetylation of tubulin in cells with an IC50 value of 210 nM.

Biological Activity



Shipping and Storage Temperature

Shipping:
Ambient

Storage:
2 years -20C, Powder 1 month, -4C in DMSO, More than one month -80C in DMSO

Solubility

Soluble in DMSO

Preparing Stock Solutions

Stock Solution (1ml DMSO)	1mM	10mM	20mM	50mM
Mass(mg)	0.2993	2.9933	5.9866	14.9665

References

1. Yang PH, Zhang L, Zhang YJ, Zhang J, Xu WF. HDAC6: physiological function and its selective inhibitors for cancer treatment. Drug Discov Ther. 2013 Dec;7(6):233-42. Review. PubMed PMID: 24423654.
2. Blackburn C, Barrett C, Chin J, Garcia K, Gigstad K, Gould A, Gutierrez J, Harrison S, Hoar K, Lynch C, Rowland RS, Tsu C, Ringeling J, Xu H. Potent histone deacetylase inhibitors derived from 4-(aminomethyl)-N-hydroxybenzamide with high selectivity for the HDAC6 isoform. J Med Chem. 2013 Sep 26;56(18):7201-11. doi: 10.1021/jm400385r. Epub 2013 Sep 4. PubMed PMID: 23964961.

Ordering Information

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