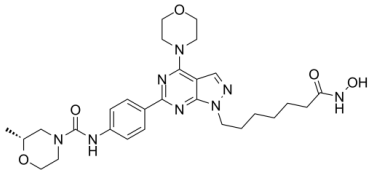
Data Sheet

Product Name:	HDACs/mTOR Inhibitor 1
Cat. No.:	CS-0084988
CAS No.:	2271413-06-8
Molecular Formula:	C28H38N8O5
Molecular Weight:	566.65
Target:	Apoptosis; HDAC; mTOR
Pathway:	Apoptosis; Cell Cycle/DNA Damage; Epigenetics; PI3K/Akt/mTOR
Solubility:	DMSO : 32.5 mg/mL (57.35 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

HDACs/mTOR Inhibitor 1 is a dual **Histone Deacetylases (HDACs)** and **mammalian target of Rapamycin (mTOR)** target inhibitor for treating hematologic malignancies, with **IC_{50}s** of 0.19 nM, 1.8 nM, 1.2 nM and >500 nM for HDAC1, HDAC6, mTOR and PI3Kα, respectively. HDACs/mTOR Inhibitor 1 stimulates cell cycle arrest in G0/G1 phase and induce tumor cell apoptosis with low toxicity in vivo[1]. IC50 & Target: IC50: 0.19 nM (HDAC1),1.8 nM (HDAC6), 1.2 nM (mTOR), >500 nM (PI3Kα)[1].

References:

[1]. Chen Y, et al. Discovery of a Novel Dual Histone Deacetylases (HDACs) and Mammalian Target of Rapamycin (mTOR) Target Inhibitor as a Promising Strategy for Cancer Therapy. J Med Chem. 2019 Jan 10.

CAIndexNames:

1H-Pyrazolo[3,4-d]pyrimidine-1-heptanamide, N-hydroxy-6-[4-[[[(2R)-2-methyl-4-morpholinyl]carbonyl]amino]phenyl]-4-(4-morpholinyl)-

SMILES:

O=C(NO)CCCCCCN1C2=NC(C3=CC=C(NC(N4C[C@@H](C)OCC4)=O)C=C3)=NC(N5CCOCC5)=C2C=N1

Caution: Product has not been fully validated for medical applications. For research use only.

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