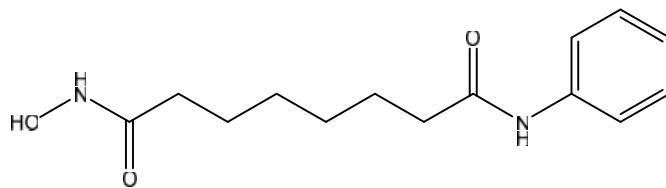


Vorinostat

SYN-3006



N1-hydroxy-N8-phenyl-octanediamide

CAS Registry No.: 149647-78-9

Smiles String:

ONC(=O)CCCCCCC(=O)NC1=CC=CC=C1

Molecular Weight: 264.32

Molecular Formula: C₁₄H₂₀N₂O₃

Lot Number: Refer to vial

¹H-NMR: Available on request

HPLC (Purity): > 95.0% @ 254 nm

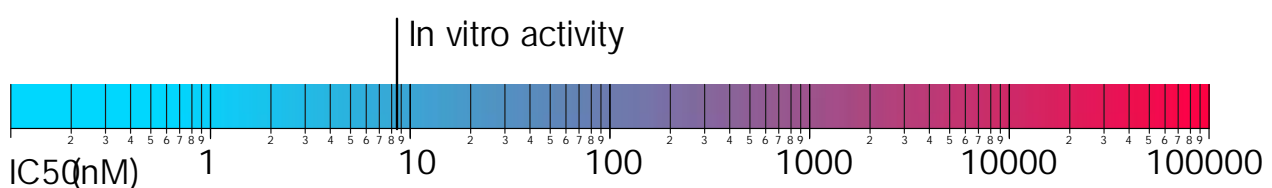
ES-MS: Available on request

Description:

Vorinostat (SAHA, MK0683, Zolinza) inhibits the enzymatic activity of histone deacetylases HDAC1, HDAC2 and HDAC3 (Class I) and HDAC6 (Class II) at nanomolar concentrations (IC₅₀ < 86 nM). These enzymes catalyze the removal of acetyl groups from the lysine residues of histones proteins. In some cancer cells, there is an overexpression of HDACs, or an aberrant recruitment of HDACs to oncogenic transcription factors causing hypoacetylation of core nucleosomal histones. By inhibiting histone deacetylase, vorinostat causes the accumulation of acetylated histones and induces cell cycle arrest and/or apoptosis of some transformed cells. The mechanism of the antineoplastic effect of vorinostat has not been fully characterized.

Biological Activity

Inhibition of histone deacetylases HDAC1, HDAC2 and HDAC3 (Class I) and HDAC6 (Class II).



Shipping and Storage Temperature

Shipping:

Ambient

Storage:

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

Solubility

DMSO 50mg/mL, Ethanol 3mg/mL, Water <1mg/mL

Preparing Stock Solutions

Stock Solution (1ml DMSO)	1mM	10mM	20mM	50mM
Mass(mg)	0.2643	2.6432	5.2864	13.216

References

1. Munshi A, Tanaka T, Hobbs ML, Tucker SL, Richon VM, Meyn RE. Vorinostat, a histone deacetylase inhibitor, enhances the response of human tumor cells to ionizing radiation through prolongation of gamma-H2AX foci. *Mol Cancer Ther.* 2006 Aug;5(8):1967-74. PubMed PMID: 16928817.
2. <http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=46508989>.

Ordering Information

To order more of this or any other SYNkinase compound, go to synkinase.com, Call us Toll Free (US Only) at 1- 877-854-6273 or email orders@synkinase.com.

Product Datasheet (Rev. 1.1)