SAHA

Pan-Histone Deacetylase (HDAC) Inhibitor

Catalog # inh-saha

For research use only

Version # 15C04-MM

PRODUCT INFORMATION

Content:

• 25 mg SAHA

Storage and stability:

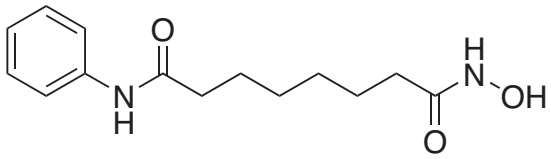
- SAHA is provided as a solid and shipped at room temperature. Store at -20 °C. Solid product is stable for 2 years when properly stored.
- Upon resuspension in DMSO, prepare aliquots of SAHA and store at -20 °C. Avoid repeated freeze-thaw cycles. Resuspended product is stable for 6 months when properly stored.

Quality control:

- Purity: >97% (UHPLC)
- The absence of bacterial contamination (e.g. lipoproteins and endotoxins) is confirmed using HEK-Blue™ TLR2 and HEK-Blue™ TLR4 cells.

CHEMICAL PROPERTIES

Synonym: Vorinostat
CAS number: 149647-78-9
Formula: $C_{14}H_{20}N_2O_3$
Molecular weight: 264.32
Solubility: 66 mg/ml in DMSO
Working concentration: 0.1 - 10 µM
Structure:



DESCRIPTION

SAHA (Vorinostat), suberoylanilide hydroxamine, also known as Vorinostat, is a pan-HDAC inhibitor. SAHA binds to the active site of histone deacetylases and act as a chelator for Zinc ions also found in the active site of histone deacetylases. SAHA has been in clinical development as a anti-cancer drug, and has antifibrotic and anti-inflammatory potential[1, 2]. The antitumor activity of SAHA has been demonstrated both *in vitro* and *in vivo* with little or no toxicity to normal cells. Under its trade name Vorinostat, SAHA has been approved by the U.S. Food and Drug Administration (FDA) for the treatment of advanced cutaneous T-cell-lymphoma[3].

1. Bolden JE. *et al*., 2006. Anticancer activities of histone deacetylase inhibitors. Nat Rev Drug Discov 5(9):769-784. **2. Wang Z. *et al*., 2009.** Suberoylanilide hydroxamic acid: a potential epigenetic therapeutic agent for lung fibrosis? EurRespir J. 34(1):145-155. **3. Mann BS. *et al*., 2006.** FDA approval summary: vorinostat for treatment of advanced primary cutaneous T-cell lymphoma. Oncologist 12: 1247–1252.

METHODS

Preparation of SAHA stock solution (100 mM)

1. Add 946 µl DMSO to 25 mg SAHA.
2. Vortex until complete solubilization.
3. Prepare aliquots and store stock solution at -20 °C.
4. Further dilutions can be prepared using aqueous buffers. We do not recommend storing the aqueous solution for more than one day.

RELATED PRODUCTS

Product	Catalog Code
CI-994 (Histone deacetylase inhibitor)	tlrl-ci99
Trichostatin A (Histone deacetylase inhibitor)	met-tsa-1
Valproic acid (Histone deacetylase inhibitor)	inh-vpa

Other signal transduction inhibitors are available, for more information visit www.invivogen.com/inhibitors

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