# PRODUCT INFORMATION



# 4-iodo-SAHA

Item No. 10495

CAS Registry No.: 1219807-87-0

Formal Name: N1-hydroxy-N8-(4-iodophenyl)

octanediamide

MF:  $C_{14}H_{19}IN_2O_3$ FW: 390.2

**Purity:** ≥98%  $\lambda_{max}$ : 255 nm A crystalline solid UV/Vis.: Supplied as:

Storage: -20°C

Stability: As supplied, 2 years from the OC date provided on the Certificate of Analysis, when

stored properly

## **Laboratory Procedures**

4-iodo-SAHA is supplied as a crystalline solid. A stock solution may be made by dissolving the 4-iodo-SAHA in the solvent of choice. 4-iodo-SAHA is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of 4-iodo-SAHA in ethanol is approximately 0.2 mg/ml and approximately 30 mg/ml in DMSO and DMF.

4-iodo-SAHA is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 4-iodo-SAHA should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. 4-iodo-SAHA has a solubility of approximately 0.1 mg/ml in a 1:10 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

4-iodo-SAHA is a hydrophobic derivative of the class I and class II histone deacetylase (HDAC) inhibitor SAHA. At 1 µM it demonstrates >60% inhibition of HDAC1 and HDAC6 activity in a deacetylase activity assay, similar to that of SAHA. 4-iodo-SAHA inhibits proliferation of SK-BR-3 breast-derived and HT29 colon-derived cell lines with EC<sub>50</sub> values comparable to that of SAHA (1.1 and 0.95  $\mu$ M versus 2.1 and 2  $\mu$ M, respectively). It is 10-fold more potent as an inhibitor of U937 leukemia cell proliferation compared to SAHA (0.12 μM versus 1.2 μM, respectively).1

#### Reference

1. Salmi-Smail, C., Fabre, A., Dequiedt, F., et al. Modified cap group suberoylanilide hydroxamic acid histone deacetylase inhibitor derivatives reveal improved selective antileukemic activity. J. Med. Chem. 53, 3038-3047 (2010).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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