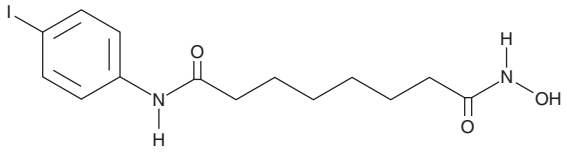
PRODUCT INFORMATION

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%
UV/Vis.: λ_{max}: 255 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: As supplied, 2 years from the QC 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_{50} values comparable to that of SAHA (1.1 and 0.95 µM *versus* 2.1 and 2 µM, 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).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM