

PRODUCT INFORMATION



SAHA-BPyne

Item No. 10675

CAS Registry No.: 930772-88-6
Formal Name: N1-hydroxy-N8-[4-[4-[(1-oxo-5-hexyn-1-yl)amino]benzoyl]phenyl]-octanediamide

Synonyms: Click Tag™ SAHA-BPyne, Suberoylanilide Hydroxamic Acid-BPyne

MF: C₂₇H₃₁N₃O₅

FW: 477.6

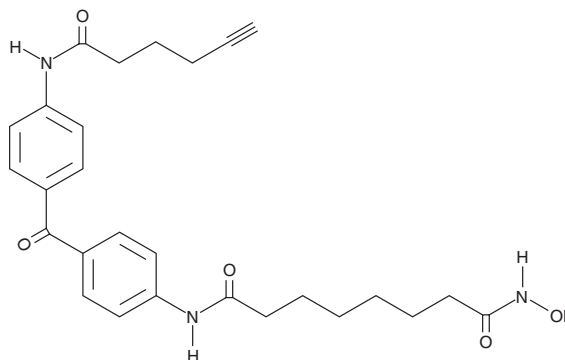
Purity: ≥98%

UV/Vis.: λ_{max}: 231, 305 nm

Supplied as: A solution in methanol

Storage: -20°C

Stability: As supplied, 1 year from the QC date provided on the Certificate of Analysis, when stored properly



Laboratory Procedures

SAHA-BPyne is supplied as a solution in methanol. To change the solvent, simply evaporate the methanol under a gentle stream of nitrogen and immediately add the solvent of choice. DMSO purged with an inert gas can be used. The solubility of SAHA-BPyne in DMSO is approximately 5 mg/ml.

If aqueous stock solutions are required for biological experiments, they can best be prepared by diluting the organic solvent into aqueous buffers or isotonic saline. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

Suberoylanilide hydroxamic acid (SAHA) is a class I and class II histone deacetylase (HDAC) inhibitor that binds directly to the catalytic site of the enzyme thereby blocking substrate access.¹ SAHA-BPyne is a SAHA derivative with a benzophenone crosslinker and an alkyne tag intended to be used for profiling HDAC activities in proteomes and live cells.^{2,3} Such terminal alkyne groups can be used in linking reactions, known as 'Click Chemistry', characterized by high dependability and specificity of azide-alkyne bioconjugation reactions.^{4,5} SAHA-BPyne labels HDAC complex proteins both in proteomes at 100 nM and in live cells at 500 nM and demonstrates an IC₅₀ value of ~3 μM for inhibition of HDAC activity in HeLa cell nuclear lysates in an HDAC activity assay.²

References

1. Marks, P.A. and Breslow, R. *Nat. Biotech.* **25**(1), 84-90 (2007).
2. Salisbury, C.M. and Cravatt, B.F. *J. Am. Chem. Soc.* **130**, 2184-2194 (2008).
3. Salisbury, C.M. and Cravatt, B.F. *Proc. Natl. Acad. Sci. USA* **104**(4), 1171-6 (2011).
4. Kolb, H.C. and Sharpless, K.B. *Drug Discov. Today* **8**(24), 1128-1137 (2003).
5. Lutz, J.-F. and Zarafshani, Z. *Adv. Drug Deliv. Rev.* **60**, 958-970 (2008).

WARNING

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

SAFETY DATA

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/08/2016

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