

# PRODUCT INFORMATION



**CAY10683**

Item No. 15403

**CAS Registry No.:** 1477949-42-0

**Formal Name:** N-[4-oxo-4-[(2-phenylethyl)amino]butyl]-carbamic acid, ethyl ester

**Synonym:** Santacruzamate A

**MF:** C<sub>15</sub>H<sub>22</sub>N<sub>2</sub>O<sub>3</sub>

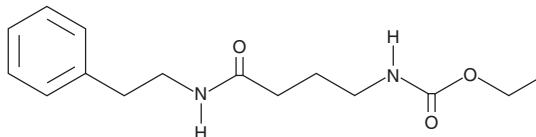
**FW:** 278.4

**Purity:** ≥95%

**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

CAY10683 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10683 in the solvent of choice. CAY10683 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of CAY10683 in ethanol and DMF is approximately 30 mg/ml and approximately 25 mg/ml in DMSO.

CAY10683 is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure 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

CAY10683 is a potent histone deacetylase (HDAC) inhibitor isolated from the cyanobacterium *Symploca*.<sup>1</sup> It inhibits HDAC2 and HDAC6 with IC<sub>50</sub> values of 0.12 and 434 nM, respectively, and is without effect against HDAC4 (IC<sub>50</sub> = >1,000 nM).<sup>1</sup> CAY10683 inhibits the growth of HCT116 colon cancer cells and HuT-78 cutaneous T cell lymphoma cells (GI<sub>50</sub> = 29.4 and 1.4 μM, respectively) more effectively than human dermal fibroblasts (GI<sub>50</sub> = >100 μM).<sup>1</sup>

## Reference

1. Pavlik, C.M., Wong, C.Y.B., Ononye, S., *et al.* Santacruzamate A, a potent and selective histone deacetylase inhibitor from the Panamanian marine cyanobacterium cf. *Symploca* sp. *J. Nat. Prod.* **76(11)**, 2026-2033 (2013).

### 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.

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## 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