Santacruzamate A



Catalog No: 14142, 14143

Format: 25 mg, 5 mg

Chemical Properties:

MW = 278.4 $C_{15}H_{22}N_2O_3$

CAS 1477949-42-0

Physical Properties: Off-white powder; MP=104-106°C

Names: N-[4-Oxo-4-[(2-phenylethyl)amino]butyl]-carbamic acid, ethyl ester

Pharmacology: Santacruzamate A is a highly potent and selective inhibitor of HDAC2 isolated from the Panamanian marine cyanobacterium cf. Symploca. (IC $_{50}$ = 0.119 and 434 nM for HDAC2 and HDAC6 respectively) (ref 1). Induces apoptosis and cancer cell death only in combination with other HDAC1 inhibitors (ref 2). Potential therapeutic agent for breast cancer (ref 3). Attenuates Ab fragment (Ab25-35)-induced toxicity in PC12 cells by enhancing ER stress tolerance (ref 4). Ameliorates Alzheimer's disease-like pathology in mouse models (ref 4).

Chemical Structure of Santacruzamate A.

Solubilization: May be dissolved in DMSO (25 mg/ml); Ethanol (20 mg/ml)

Fluorescent Properties: N/A

Quality Control:

>98% (TLC); NMR (Conforms)

References:

1. CM Pavlik et al. J. Nat. Prod. 2013 76:2026

- 2. H Zhou et al. Cell Prolif. 2018 51(3):e12477
- 3. C Damaskos et al. Anticancer Res. 2017 37:35
- 4. L Chen et al. Front. Cell. Neurosci. 2019 13:61

Storage and Guarantee: Store desiccated as supplied at room temperature for up to 1 year. Store solutions at -20°C for up to 2 months. This product is guaranteed for 6 months from date of arrival.

Not for human therapeutic use or for medical purposes. For research purposes only.