

HC Toxin

Catalog #: 27209

Lot #: 120529

Size: 500 µg

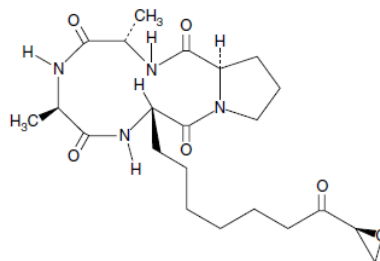
Structure:

CAS Registry #: 83209-65-8

Purity: ≥95%

Chemical Formula: C₂₂H₃₄N₄O₆

Molecular Weight: 450.5



Description: HC Toxin is a reversible, cell-permeable inhibitor of HDACs. It is a cyclic tetrapeptide first isolated from *C. carbonum*, a maize pathogen. It up-regulates the expression of 15-lipoxygenase-1 in colorectal cancer cells and has been shown to induce fetal hemoglobin in human primary erythroid cells.

Appearance: A crystalline solid

Solubility: Soluble in methanol, purged with an inert gas. Solubility in methanol is approximately 10 mg/ml. For organic solvent-free aqueous solutions, prepare by directly dissolving the crystalline compound in aqueous buffers. Do not store aqueous solutions for more than one day.

Biological Activity: HC Toxin inhibits HDACs with an IC₅₀ = 30 nM.

Storage/Stability: Store at or below -20°C for up to two years.

Quality Control: The purity was determined by HPLC analysis.

References:

1. Brosch, G., *et al.*, *Plant Cell*. 1995; **7**: 1941-1950.
2. Darkin-Rattray, SJ, *et al.*, *Proc. Natl. Acad. Sci. USA*. 1996; **93(23)**: 13143-13147.
3. Kamitani, H., *et al.*, *Carconogenesis*. 2001; **22(1)**: 187-191.
4. Cao, H., *et al.*, *Am. J. Hematol*. 2006; **81**: 981-983.
5. Walton, JD., *Phytochemistry*. 2006; **67**: 1406-1413.