WEST BIOSCIENCE

Data Sheet

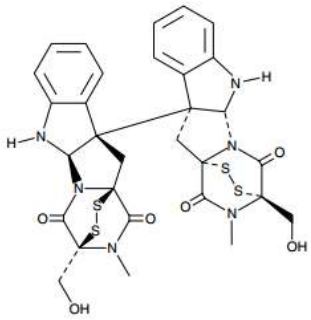
Chaetocin

Catalog #: w37232

Lot #: 120626

Size: 1 mg

Structure:



CAS Registry #: 28097-03-2

Purity: ≥95%

Chemical Formula: $C_{30}H_{28}N_6O_6S_4$

Molecular Weight: 696.8

Description: Chaetocin is an inhibitor of histone methyltransferases (HMTs) including SUV39H1 and Lys9-specific HMTs such as G9a. It also has some inhibitory effects on SET7, EZH2, and SET7/9. Chaetocin has also been shown to induce cellular oxidative stress, and as a result, cancer cells are selectively killed and primary cells rapidly proliferate. It is a fungal myotoxin. The inhibitor is useful in epigenetics and cancer research.

Appearance: A crystalline solid

Solubility: Soluble in organic solvents purged with an inert gas and solubility is 25 mg/ml. Do not store aqueous solutions for more than one day.

Biological Activity: Chaetocin inhibits SUV39H1 with an IC_{50} = 0.8 µM, G9a with an IC_{50} = 2.5 µM, and DIM5 with an IC_{50} = 3 µM.

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

Quality Control: The purity was determined by HPLC analysis.

References:

1. Greiner, D., *et al., Nat. Chem. Biol.* 2005;**1(3)**:143-145.
2. Isham, C.R., *et al., Blood* 2007;**109(6)**:2579-2588.
3. Tibodeau, J.D., *et al., Antioxid. Redox Signal.* 2009;**11(5)**:1097-1106.
4. Spannhoff, A., *et al., Int. J. Biochem. Cell Biol.* 2009;**41**:4-11.
5. Copeland, R.A., *et al., Nat. Rev. Drug Discov.* 2009;**8**:724-732.

9891 Irvine Center Dr. Suite 200, Irvine, CA 92618, United States
Tel: 1.800.831.1518 ● Fax: 1.800.830.1518
Email: sale@westbioscience.com ● Visit: www.westbioscience.com