

**Product Name:** Chaetocin

**Catalog No.:** 4504

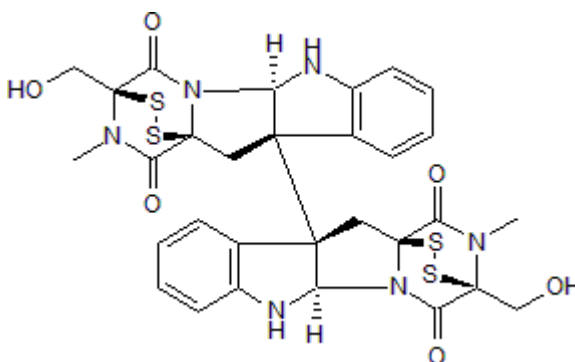
**Batch No.:** 1

**CAS Number:** 28097-03-2

**IUPAC Name:** (3*S*,3'*S*,5*aR*,5*aR*,10*bR*,10'*bR*,11*aS*,11'*aS*)-2,2',3,3',5*a*,5'*a*,6,6'-octahydro-3,3'-bis(hydroxymethyl)-2,2'-dimethyl-[10*b*,10'*b*(11*H*,11'*H*)-bi3,11*a*-epidithio-11*aH*-pyrazino[1',2':1,5]pyrrolo[2,3-*b*]indole]-1,1',4,4'-tetrone

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>30</sub>H<sub>28</sub>N<sub>6</sub>O<sub>6</sub>S<sub>4</sub>  
**Batch Molecular Weight:** 696.84  
**Physical Appearance:** Off-white lyophilised solid  
**Solubility:** DMSO to 10 mM  
**Storage:** Store at -20°C  
**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**HPLC:** Shows 99% purity

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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**Description:**

Histone methyltransferase SUV39H1 inhibitor (IC<sub>50</sub> = 0.8 μM). Induces apoptosis in myeloma cell lines in vitro; exhibits antiproliferative activity in a mouse myeloma model in vivo.

**Physical and Chemical Properties:**

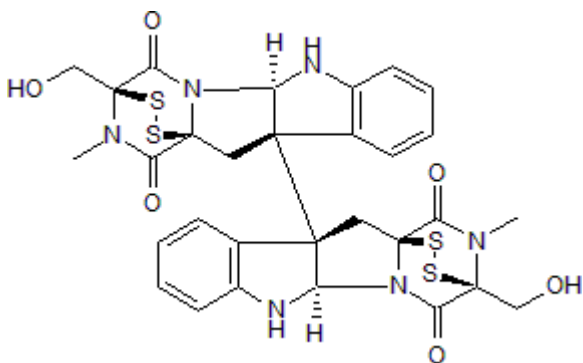
Batch Molecular Formula: C<sub>30</sub>H<sub>28</sub>N<sub>6</sub>O<sub>6</sub>S<sub>4</sub>

Batch Molecular Weight: 696.84

Physical Appearance: Off-white lyophilised solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**



**Storage:** Store at -20°C

**Solubility & Usage Info:**

DMSO to 10 mM

**Stability and Solubility Advice:**

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

**SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

**SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

**References:**

**Greiner et al** (2005) Identification of a specific inhibitor of the histone methyltransferase SU(VAR)3-9. *Nat.Chem.Biol.* **1** 143. PMID: 16408017.

**Isham et al** (2007) Chaetocin: a promising new antimyeloma agent with in vitro and in vivo activity mediated via imposition of oxidative stress. *Blood* **109** 2579. PMID: 17090648.

**Cherblanc et al** (2013) Chaetocin is a nonspecific inhibitor of histone lysine methyltransferases. *Nat.Chem.Biol.* **9** 136. PMID: 23416387.

**Greiner et al** (2013) Reply to "Chaetocin is a nonspecific inhibitor of histone lysine methyltransferases". *Nat.Chem.Biol.* **9** 137. PMID: 23416388.

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