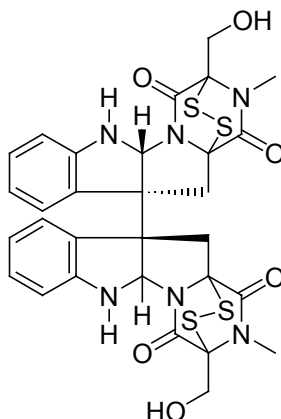


## Chaetocin

Code: **BIA-C1146**

Pack sizes: **1 mg, 5 mg**



Synonyms : **Chetocin**

## Specifications

CAS # : **28097-03-2**  
Molecular Formula : **C<sub>30</sub>H<sub>28</sub>N<sub>6</sub>O<sub>6</sub>S<sub>4</sub>**  
Molecular Weight : **696.85**  
Source : ***Chaetomium* sp. MST-FP2085**  
Appearance : **White solid**  
Purity : **> 99% by HPLC**  
Long Term Storage : **-20°C**  
Solubility : **DMSO, DMF, methanol and ethanol. Poorly soluble in water**

## Application Notes

Chaetocin is an epithiodioxopiperazine antibiotic that has recently shown promise as a selective antitumor agent. Chaetocin is specific inhibitor for the lysine-specific methyltransferase SU(VAR)3-9 both *in vitro* and *in vivo*. Chaetocin is dramatically accumulated in cancer cells *via* a process inhibited by glutathione. Inside the cell, its activity is mediated by the imposition of oxidative stress.

## References

1. Isolation and configuration of Chaetocin Hauser, D. et. al. *Helv. Chim. Acta* **1970**, 53, 1061
2. Identification of a specific inhibitor of the histone methyltransferase SU(VAR)3-9. Greiner, D., et al. *Nature Chem. Biol.* **2005**, 1, 143.
3. Chaetocin, a promising new anti-myeloma agent with in vitro and in vivo activity mediated via imposition of oxidative stress. Isham C. R. et. al. *Blood* **2007**, 109, 2579.