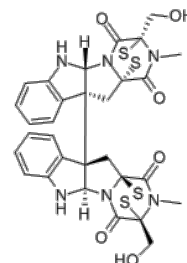


Product Name : Chaetocin
Cat. No. : PC-62758
CAS No. : 28097-03-2
Molecular Formula : C₃₀H₂₈N₆O₆S₄
Molecular Weight : 696.851
Target : Histone Methyltransferase (HMTase)
Solubility : 10 mM in DMSO



Biological Activity

Chaetocin is a potent, specific, SAM-competitive inhibitor of **histone H3K9 methyltransferase (HMT) SU(VAR)3-9** with IC₅₀ of 0.6 μM, no activity against H4 Lys20-specific HMT PRSET7 and SET7/9.

Chaetocin inhibits the human ortholog of dSU(VAR)3-9 with IC₅₀ of 0.8 μM, also inhibits Lys9-specific HMTs such as mouse G9a and Neurospora crassa DIM5 (IC₅₀=2.5 and 3 μM).

Chaetocin prolongs survival and restores mitochondrial dysfunction, improves prognosis in a rat model of high salt diet-induced heart failure.

Chaetocin induces cell cycle arrest and apoptosis in melanoma cells.

References

Greiner D, et al. *Nat Chem Biol*. 2005 Aug;1(3):143-5.

Vo MC, et al. *Oncotarget*. 2017 Jul 11;8(28):46047-46056.

Yang G, et al. *Nat Commun*. 2017 Mar 31;8:14941.

Ono T, et al. *Sci Rep*. 2017 Jan 4;7:39752.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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