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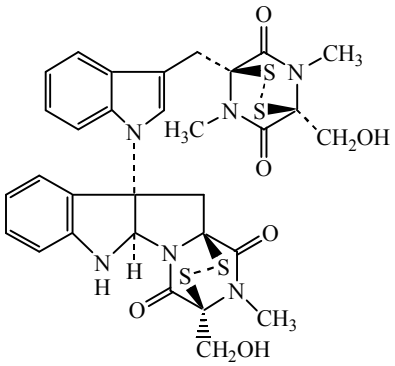
Product Information

Chetomin
from *Chaetomium cochliodes*

Catalog Number **C9623**
Storage Temperature -20 °C

CAS RN 1403-36-7

Synonyms: Chaetomin, NSC 289491



Product Description
Molecular Weight: 710.87
Molecular formula: $C_{31}H_{30}N_6O_6S_4$

Purity: ≥98% (HPLC)

Chetomin is a natural metabolite produced by several species of the genus *Chaetomium*.[1] Chetomin is an epidithiodioxopiperazine known to disrupt the hypoxia-inducible factor (HIF) pathway. Chetomin blocks the interaction of HIF1α and HIF2α with transcriptional co-activators p300 and cAMP response element binding (CREB) binding protein (CBP), thereby attenuating hypoxia-inducible transcription. Disrupting the ability of tumors to adapt to hypoxia leads to decreased tumor growth and can serve as an antitumor stratagy.[2]

Chetomin also suppresses the proliferation of LPS-induced mouse spleen lymphocytes.[1, 3].

Precautions and Disclaimer
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions
Chetomin is soluble in DMSO, acetone, and ethyl acetate.

Storage/Stability
Store the product sealed at –20 °C. Under these conditions the product is stable for at least 2 years. Solution of product is not stable and should be prepared immediately before use.

References
1. Jen, W.C., and Jones, G.A., Effects of chetomin on growth and acidic fermentation products of rumen bacteria. *Can. J. Microbiol.*, **29**, 1399-1404 (1983).
2. Kung, A., et al., Small molecule blockade of transcriptional co-activation of the hypoxia-inducible factor pathway. *Cancer Cell*, **6**, 33-43 (2004).
3. Fujimoto, H., et al., Immunomodulatory constituents from an Ascomycete, Chaetomium seminudum. *J. Nat. Prod.*, **67,** 98-102 (2004).

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