

Product Information

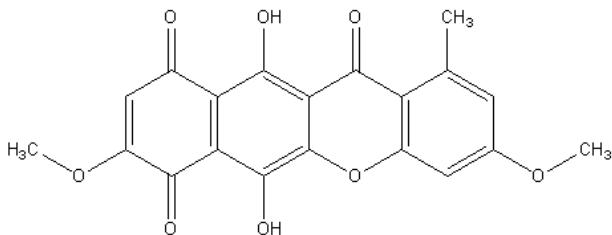
Bikaverin from *Fusarium subglutinans*

Catalog Number **SML0724**

Storage Temperature –20 °C

CAS RN 33390-21-5

Synonyms: Lycopersin, NSC 215139



Product Description

Molecular formula: C₂₀H₁₄O₈

Molecular weight: 382.32

Bikaverin is a red pigment with a polyketide tetracyclic benzoxanthone structure. Bikaverin has an antibiotic activity against some protozoa and fungi, and also inhibits succinate and NAD-linked respiration in rat mitochondria at 20 µg/mL.¹⁻³ At higher concentrations (50 µg/mL), it acts as an oxidative phosphorylation uncoupling agent of tumor cells and isolated rat liver mitochondria.⁴ Bikaverin demonstrates antitumor activity on Ehrlich ascites carcinoma (EAC), leukemia, and sarcoma cells.⁵

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

Bikaverin is soluble in DMSO (0.5 mg/mL, may require sonication and heating). For further dilution, water based solutions can be used. It is also soluble in chloroform (0.5 mg/mL) and dichloromethane (0.5 mg/mL).

Storage/Stability

Store the product sealed at –20 °C. Under these conditions the product is stable for at least 2 years.

References

1. Balan, J. et al., Bikaverin, an antibiotic from *ibberella fujikoi*, effective against *Leishmania brasiliensis*. *Folia Microbiol. (Praha)*, **15**, 479-484 (1970).
2. Cornforth, J.W. et al., Isolation and characterization of a fungal vacuolation factor (bikaverin). *J. Chem. Soc. Perkin 1*, **16**, 2786-2788 (1971).
3. Suzuki, T. et al., Reexamination of respiration-impairing effect of bikaverin on isolated mitochondria. *Mycotoxin Res.*, **14**, 19-27 (1998).
4. Kováč, L. et al., Inhibition of mitochondrial functions by the antibiotics, bikaverin and duclauxine. *J. Antibiot. (Tokyo)*, **31**, 616-620 (1978).
5. Fuska, J. et al., New potential cytotoxic and antitumor substances I. *In vitro* effect of bikaverin and its derivatives on cells of certain tumors. *Neoplasma*, **22**, 335-338 (1975).

DWF,MAM 07/13-1