

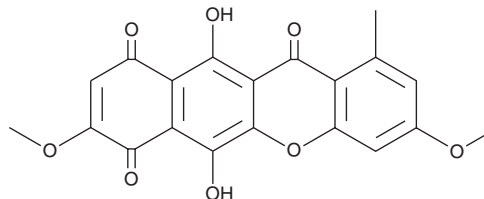
# PRODUCT INFORMATION



## Bikaverin

Item No. 27467

**CAS Registry No.:** 33390-21-5  
**Formal Name:** 6,11-dihydroxy-3,8-dimethoxy-1-methyl-10H-benzo[b]xanthene-7,10,12-trione  
**Synonyms:** Lycopersin, NSC 215139  
**MF:** C<sub>20</sub>H<sub>14</sub>O<sub>8</sub>  
**FW:** 382.3  
**Purity:** ≥95%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years  
**Item Origin:** Fungus/*Fusarium* sp.



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Bikaverin is supplied as a solid. A stock solution may be made by dissolving the bikaverin in the solvent of choice, which should be purged with an inert gas. Bikaverin is soluble in the organic solvent DMSO.

### Description

Bikaverin is a fungal metabolite originally isolated from *F. oxysporum* f. sp. *lycopersici* that has diverse biological activities.<sup>1-4</sup> It is active against *L. braziliensis* when used at a concentration of 0.15 µg/ml and against *B. xylophilus* at a concentration of 100 µg/ml.<sup>2</sup> It inhibits proliferation of NCI-H460, MIA PaCa-2, MCF-7, and SF-268 cells (IC<sub>50</sub>s = 0.43, 0.26, 0.42, and 0.38 µM, respectively).<sup>3</sup> Bikaverin inhibits the growth of certain plant pathogenic fungi, including *R. solani*, *P. capsici*, *P. infestans*, and *M. grisea* (IC<sub>50</sub>s = <1.2, 10, 60, and 70 µg/ml, respectively).<sup>4</sup> It inhibits the development and provides disease control of tomato late blight and wheat leaf rust caused by *P. infestans* and *P. recondita*, respectively, when applied at a concentration of 300 µg/ml.

### References

1. Nord, F.F. Structure of some *Fusarium* pigments and their action. *Intern. Congr. Biochem., Abstrs. of Commun. 1st Congr. Cambridge, Engl.* 243-244 (1949).
2. Limón, M.C., Rodríguez-Ortiz, R., and Avalos, J. Bikaverin production and applications. *Appl. Microbiol. Biotechnol.* **87**(1), 21-29 (2010).
3. Zhan, J., Burns, A.M., Liu, M.X., et al. Search for cell motility and angiogenesis inhibitors with potential anticancer activity: Beauvericin and other constituents of two endophytic strains of *Fusarium oxysporum*. *J. Nat. Prod.* **70**(2), 227-232 (2007).
4. Son, S.W., Kim, H.Y., Choi, G.J., et al. Bikaverin and fusaric acid from *Fusarium oxysporum* show antioomycete activity against *Phytophthora infestans*. *J. Appl. Microbiol.* **104**(3), 692-698 (2008).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD

ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897

[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM