

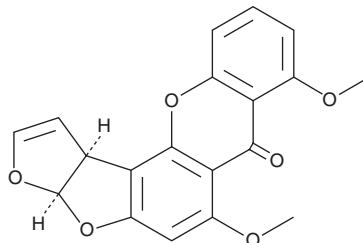
PRODUCT INFORMATION



O-methyl Sterigmatocystin

Item No. 22070

CAS Registry No.: 17878-69-2
Formal Name: 3aR,12cS-dihydro-6,8-dimethoxy-7H-furo[3',2':4,5]furo[2,3-c]xanthen-7-one
Synonym: OMST
MF: C₁₉H₁₄O₆
FW: 338.3
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Fungus/*Chaetomium* sp.



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

Laboratory Procedures

O-methyl Sterigmatocystin (OMST) is supplied as a solid. A stock solution may be made by dissolving the OMST in the solvent of choice. OMST is soluble in organic solvents such as DMSO and dimethyl formamide.

Description

OMST is a xanthone found in several fungal species including *A. flavus*, *A. parasiticus*, *A. versicolor*, and *B. piluliferum*.^{1,2} It is a carcinogenic precursor of aflatoxin G₁ (Item No. 11295) and aflatoxin B₁ (Item No. 11293) that is a known contaminant of agricultural soils.¹⁻³ OMST is cytotoxic against NCI-H187 human small cell lung cancer cells and African green monkey kidney (*Vero*) cells (IC₅₀s = 62.2 and 0.65 mM, respectively).³

References

1. Bhatnagar, D., McCormick, S.P., Lee, L.S. *et al.* Identification of O-methylsterigmatocystin as an aflatoxin B₁ and G₁ precursor in *Aspergillus parasiticus*. *Appl. Environ. Microbiol.* **53**(5), 1028-1033 (1987).
2. Garner, R. C. and C. M. Wright Induction of mutations in DNA-repair deficient bacteria by a liver microsomal metabolite of aflatoxin B₁. *Br. J. Cancer* **28**(6), 544-551 (1973).
3. Rajachan, O., Kanokmedhakul, K., Soyong, K. *et al.* Mycotoxins from the fungus *Botryotrichum piluliferum*. *J. Agric. Food Chem.* **65**(7), 1337-1341 (2017).

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