

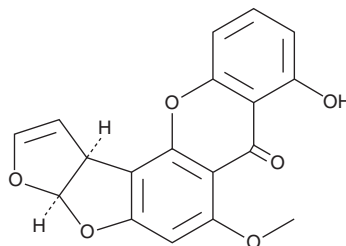
PRODUCT INFORMATION



Sterigmatocystin

Item No. 11441

CAS Registry No.: 10048-13-2
Formal Name: (3aR,12cS)-3a,12c-dihydro-8-hydroxy-6-methoxy-7H-furo[3',2':4,5]furo[2,3-c]xanthen-7-one
Synonyms: NSC 201423, NSC 204985
MF: C₁₈H₁₂O₆
FW: 324.3
Purity: ≥98%
UV/Vis.: λ_{max}: 247, 326 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Sterigmatocystin is supplied as a crystalline solid. A stock solution may be made by dissolving the sterigmatocystin in the solvent of choice, which should be purged with an inert gas. Sterigmatocystin is soluble in the organic solvent acetone at a concentration of approximately 5 mg/ml.

Description

Sterigmatocystin is a mycotoxin that has been found in *Aspergillus*.^{1,2} It is lethal to rats (LD₅₀ = 60 mg/kg) and chick embryos (LD₅₀s = 5-7 µg/embryo).² Sterigmatocystin (100 and 1,000 ppb in drinking water) induces gastritis, as well as intestinal polyp formation and metaplasia in aged Mongolian gerbils.¹ It induces formation of lung and liver adenomas and malignant lymphomas in newborn mice.³

References

1. Kusunoki, M., Misumi, J., Shimada, T., *et al.* Long-term administration of the fungus toxin, sterigmatocystin, induces intestinal metaplasia and increases the proliferative activity of PCNA, p53, and MDM2 in the gastric mucosa of aged Mongolian gerbils. *Environ. Health Prev.Med.* **16**(4), (2011).
2. Schroeder, H. W., and Kelton, W. H. Production of sterigmatocystin by some species of the genus *Aspergillus* and its toxicity to chicken embryos. *Appl. Microbiol.* **30**(4), (1975).
3. Fujii, K., Kurata, H., Odashima, S., *et al.* Tumor induction by a single subcutaneous injection of sterigmatocystin in newborn mice. *Cancer Res.* **36**(5), 1615-1618 (1976).

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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