

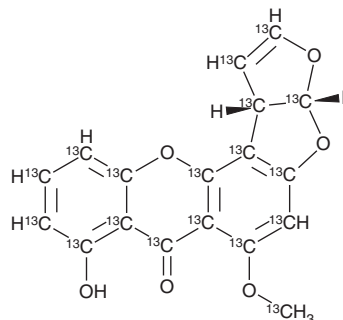
# PRODUCT INFORMATION



## Sterigmatocystin-<sup>13</sup>C<sub>18</sub>

Item No. 31302

**Formal Name:** (3aR,12cS)-8-hydroxy-6-(methoxy-<sup>13</sup>C)-3a,12c-dihydro-7H-furo[3',2':4,5]furo[2,3-c]xanthen-7-one-1,2,3a,4a,5,6,6a,7,7a,8,9,10,11,11a,12a,12b,12c-<sup>13</sup>C<sub>17</sub>  
**MF:** [<sup>13</sup>C]<sub>18</sub>H<sub>12</sub>O<sub>6</sub>  
**FW:** 342.2  
**Purity:** ≥90%  
**Supplied as:** A 25 µg/ml solution in acetonitrile  
**Storage:** -20°C  
**Stability:** ≥2 years



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

### Description

Sterigmatocystin-<sup>13</sup>C<sub>8</sub> is intended for use as an internal standard for the quantification of sterigmatocystin (Item No. 11441) by GC- or LC-MS. Sterigmatocystin is a mycotoxin that has been found in *Aspergillus*.<sup>1,2</sup> It is lethal to rats (LD<sub>50</sub> = 60 mg/kg) and chick embryos (LD<sub>50</sub>s = 5-7 µg/embryo).<sup>2</sup> Sterigmatocystin (100 and 1,000 ppb in drinking water) induces gastritis, as well as intestinal polyp formation and metaplasia in aged Mongolian gerbils.<sup>1</sup> It induces formation of lung and liver adenomas and malignant lymphomas in newborn mice.<sup>3</sup>

### 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), 224-231 (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), 589-591 (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.

#### WARRANTY AND LIMITATION OF REMEDY

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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