PRODUCT INFORMATION



Aflatoxin G_1 - $^{13}C_{17}$ Item No. 31262

CAS Registry No.: 1217444-07-9

Formal Name: (7aR,10aS)-5-(methoxy-13C)-3,4,7a,10a-

> tetrahydro-1H,12H-furo[3',2':4,5] furo[2,3-h]pyrano[3,4-c]chromene-1,12dione-1,3,4,4a,4b,5,6,6a,7a,9,10,10a,10b,

10c,12,12a-13C₁₆

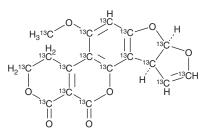
MF: [13C]₁₇H₁₂O₇

FW: 345.1 **Purity:** ≥98%

Supplied as: A 0.5 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

Aflatoxin $G_1^{-13}C_{17}$ is intended for use as an internal standard for the quantification of aflatoxin G_1 (Item No. 11295) by GC- or LC-MS. Aflatoxin G_1 is a mycotoxin that has been found in A. terricola. In vivo, aflatoxin $\rm G_1$ is lethal to ducklings (LD₅₀ = 1.18 mg/kg).² It induces hepatocellular carcinoma tumor formation and lethality in rats when administered at doses of 1.4 and 3 mg/animal, respectively. Aflatoxin G₁ also inhibits liver and kidney succinate dehydrogenase and fumarase, as well as kidney cytochrome oxidase, NADH oxidase, α-glycerophosphate dehydrogenase, isocitrate dehydrogenase, and malate dehydrogenase in rats.³

References

- 1. Moubasher, A.H., el-Kady, I.A., and Shoriet, A. Toxigenic Aspergilli isolated from different sources in Egypt. Ann. Nutr. Aliment. 31(4-6), 607-615 (1977).
- 2. Wogan, G.N., Edwards, G.S., and Newberne, P.M. Structure-activity relationships in toxicity and carcinogenicity of aflatoxins and analogs. Cancer Res. 31(12), 1936-1942 (1971).
- 3. Bai, N.J., Pai, M.R., and Venkitasubramanian, T.A. Mitochondrial function in aflatoxin toxicity. Indian J. Biochem. Biophys. 14(4), 347-349 (1977).

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

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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