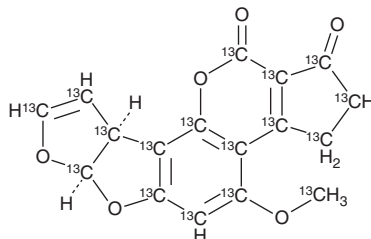


PRODUCT INFORMATION



Aflatoxin B₁-¹³C₁₇ Item No. 31260

CAS Registry No.: 1217449-45-0
Formal Name: (6aR,9aS)-4-(methoxy-¹³C)-2,3,6a,9a-tetrahydrocyclopenta[c]furo[3',2':4,5]furo[2,3-h]chromene-1,11-dione-1,2,3,3a,3b,4,5,5a,6a,8,9,9a,9b,9c,11,11a-¹³C₁₆
Synonym: AFB₁-¹³C₁₇
MF: [¹³C]₁₇H₁₂O₆
FW: 329.1
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

AFB₁-¹³C₁₇ is intended for use as an internal standard for the quantification of AFB₁ (Item No. 11293) by GC- or LC-MS. AFB₁ is a genotoxic mycotoxin that has been found in *Aspergillus*.^{1,2} It induces the formation of DNA adducts in rat liver microsomes.¹ AFB₁ induces transversion of guanine to thymine at codon 29 of the p53 tumor suppressor gene, a mutation commonly seen in hepatocellular carcinoma patients living in regions with high levels of aflatoxin contamination, in HepG2 cells.² *In vivo*, AFB₁ (50 and 100 µg/kg) induces hepatocellular carcinoma tumor formation in rats.³

References

1. Essigmann, J.M., Croy, R.G., Nadzan, A.M., *et al.* Structural identification of the major DNA adduct formed by aflatoxin B₁ *in vitro*. *Proc. Natl. Acad. Sci. USA* **74**(5), 1870-1874 (1977).
2. Aguilar, F., Hussain, S.P., and Cerutti, P. Aflatoxin B₁ induces the transversion of G → T in codon 249 of the p53 tumor suppressor gene in human hepatocytes. *Proc. Natl. Acad. Sci. USA* **90**(18), 8586-8590 (1993).
3. Wogan, G.N., Paglialunga, S., and Newberne, P.M. Carcinogenic effects of low dietary levels of aflatoxin B₁ in rats. *Fd. Cosmet. Toxicol.* **12**(5-6), 681-685 (1974).

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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