

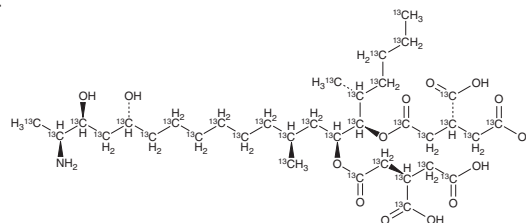
PRODUCT INFORMATION



Fumonisin B₂-¹³C₃₄ Item No. 31273

CAS Registry No.: 1217481-36-1
Formal Name: (2R,2'R)-2,2'-(((5R,6R,7S,9S,16R,18S,19S)-19-amino-16,18-dihydroxy-5,9-di(methyl-¹³C)icosane-6,7-diyl-1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20-¹³C₂₀)bis(oxy))bis(2-oxoethane-2,1-diyl-1,2-¹³C₂))disuccinic-¹³C₄ acid

Synonym: FB₂
MF: [¹³C]₃₄H₅₉NO₁₄
FW: 739.6
Purity: ≥98%
Supplied as: A 10 µg/ml solution in acetonitrile:water (1:1)
Storage: -20°C
Stability: ≥2 years



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

Description

FB₂-¹³C₃₄ is intended for use as an internal standard for the quantification of FB₂ (Item No. 13227) by GC- or LC-MS. FB₂ is a mycotoxin that has been found in *F. moniliforme*.¹ It is cytotoxic against a panel of seven rat hepatoma cell lines (IC₅₀s = 3-50 µg/ml), as well as MDCK cells (IC₅₀ = 2 µg/ml).² FB₂ (125-1,000 µM) is also cytotoxic to primary rat hepatocytes and induces hepatocyte nodule formation, a marker of cancer initiation, in rats when administered at a dose of 1,000 mg/kg for 21 days.³ FB₂ has been detected in corn and corn-based foods and livestock feeds.⁴

References

1. Gelderblom, W.C.A., Jaskiewicz, K., Marasas, W.F.O., *et al.* Fumonisin-novel mycotoxins with cancer-promoting activity produced by *Fusarium moniliforme*. *Appl. Environ. Microbiol.* **54**(7), 1806-1811 (1988).
2. Shier, W.T., Abbas, H.K., and Mirocha, C.J. Toxicity of the mycotoxins fumonisins B₁ and B₂ and *Alternaria alternata* f. sp. *lycopersici* toxin (AAL) in cultured mammalian cells. *Mycopathologia* **116**(2), 97-104 (1991).
3. Gelderblom, W.C.A., Cawood, M.E., Snyman, S.D., *et al.* Structure-activity relationships of fumonisins in short-term carcinogenesis and cytotoxicity assays. *Food Chem. Toxicol.* **31**(6), 407-414 (1993).
4. Bullerman, L.B. Occurrence of *Fusarium* and fumonisins on food grains and in foods. *Fumonisin in food*. Jackson, L.S., DeVries, J.W., Bullerman, L.B., editors, 1st edition, Springer (1996).

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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 08/30/2023

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