

Product Information

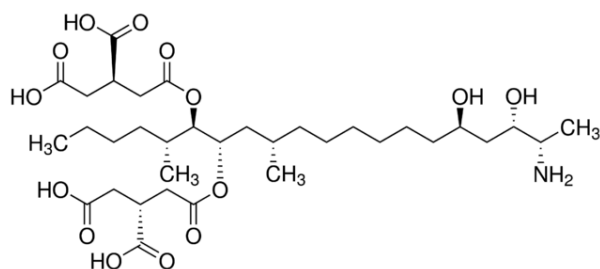
Fumonisin B₂, Ready Made Solution from *Fusarium moniliforme*

Catalog Number **F7817**

Storage Temperature $-20\text{ }^{\circ}\text{C}$

CAS RN 116355-84-1

Synonym: 1,1'-[(1S,2R)-1-[(2S,9R,11S,12S)-12-amino-9,11-dihydroxy-2-methyltridecyl]-2-[(1R)-1-methylpentyl]-1,2-ethanediyl]ester-1,2,3-propanetricarboxylic acid



Product Description

Molecular formula: C₃₄H₅₉NO₁₄

Molecular weight: 705.83

Fumonisin B₂ is one of the most abundant fumonisins occurring worldwide in maize crops.^{1,2} It has been shown to inhibit protein serine/threonine phosphatases (PP1, PP2A, PP2B, PP2C, and PP5/T/K/H). It is also involved in the activation of mitogen-activated protein kinase (MAPK).³ While Fumonisin B₁ induces apoptosis via altered sphingolipid metabolism, resulting in hepatotoxicity and nephrotoxicity, Fumonisin B₂ increases sphinganine levels in IHKE cells without apoptosis induction.⁴

This product is supplied as a 0.2 μm filtered, 1.4 mM solution in dimethyl sulfoxide (DMSO).

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Store the product sealed at $-20\text{ }^{\circ}\text{C}$. Under these conditions, the product is stable for at least 2 years.

References

1. Wei, T. et al., Natural occurrence of fumonisins B₁ and B₂ in corn in four provinces of China. *Food Addit. Contam. Part B. Surveill.*, **6**, 270-274 (2013).
2. Musser, S.M., and Plattner, R.D., Fumonisin Composition in Cultures of *Fusarium moniliforme*, *Fusarium proliferatum*, and *Fusarium nygami*. *J. Agr. Food Chem.*, **45(4)**, 1169-1173 (1997).
3. Fukuda, H. et al., Inhibition of Protein Serine/Threonine Phosphatases by Fumonisin B₁, a mycotoxin. *Biochem. Biophys. Res. Commun.*, **220**, 160-165 (1996).
4. Seefelder, W. et al., Induction of apoptosis in cultured human proximal tubule cells by fumonisins and fumonisin metabolites. *Toxicol. Appl. Pharmacol.*, **192**, 146-153 (2003).

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