# **PRODUCT** INFORMATION



**Fumonisin B**<sub>3</sub>-<sup>13</sup>C<sub>34</sub> *Item No.* 31274

nem	110.	JIZ/	-

Formal Name:	(2R,2'R)-2,2'-((((5R,6R,7S,9S,11R,	
	18S,19S)-19-amino-11,18-dihydroxy	
	-5,9-di(methyl- <sup>13</sup> C)icosane-6,7-	12011
	diyl-1,2,3,4,5,6,7,8,9,10,11,12,13,14,	
	15,16,17,18,19,20- <sup>13</sup> C <sub>20</sub> )bis(oxy))bis	H <sub>2</sub> <sup>13</sup> CH <sub>2</sub>
	$(2-\text{oxoethane}-2,1-\text{diyl}-1,2-^{13}\text{C}_2))$	Н <sub>3</sub> <sup>13</sup> С., <sub>Н</sub> <sup>1</sup> 3СН₂ О <sub>№</sub> _ОН
	disuccinic- <sup>13</sup> C₄ acid	
Synonym:	FB <sub>3</sub> - <sup>13</sup> C <sub>34</sub>	$\begin{array}{c} H_{3}{}^{13}C \\ & H_{3}{}^{13}C \\ & H_{3}{}^{13}C \\ & H_{3}{}^{13}C \\ & H_{3}{}^{2}C \\ & H_{3}{}^{2}C$
MF:	[ <sup>13</sup> C] <sub>34</sub> H <sub>59</sub> NO <sub>14</sub>	$H_2 H_2 H_2 H_2 H_2 H_2 H_2 H_2 H_2 H_2 $
FW:	739.6	i3C I3C H2J3C
Purity:	≥95%	о 13 <sup>с</sup> Он
Supplied as:	A 10 µg/ml 1:1 solution in acetonitrile:water	
Storage:	-20°C	
Stability:	≥2 years	
1 ( )		

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

## Description

 $FB_3$ -<sup>13</sup>C<sub>34</sub> is intended for use as an internal standard for the quantification of fumonisin  $B_3$  (Item No. 20434) by GC- or LC-MS.  $FB_3$  is a mycotoxin that has been found in *Fusarium*.<sup>1</sup> It is cytotoxic to primary rat hepatocytes when used at concentrations of 125, 250, and 500  $\mu$ M.<sup>2</sup> Dietary administration of  $FB_3$  (0.05%) for 14 or 21 days induces hepatocyte nodules, a marker of cancer initiation, in rats.<sup>2</sup>  $FB_3$  has been detected in corn and corn-based foods and livestock feeds.<sup>3</sup>

## References

- 1. Rheeder, J.P., Marasas, W.F.O., and Vismer, H.F. Production of fumonisin analogs by Fusarium species. Appl. Environ. Microbiol. 68(5), 2101-2105 (2002).
- 2 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).
- 3. Bullerman, L.B. Occurrence of Fusarium and fumonisins on food grains and in foods. Fumonisins 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.

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