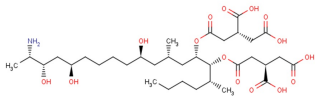
Data Sheet (Cat.No.T15356)

TargetMol
A DRUG SCREENING EXPERT

Fumonisin B1

Chemical Properties



CAS No.:	116355-83-0
Formula:	C34H59NO15
Molecular Weight:	721.83
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	Fumonisin B1 is the most abundant and toxic fumonisin and is a mycotoxin produced from Fusarium moniliforme. Fumonisin B1 is also a potent inhibitor of sphingosine N-acyltransferase (ceramide synthase) and disrupts de novo sphingolipid biosynthesis.
Targets(IC_{50})	Sphingosine N-acyltransferase: None
In vitro	Fumonisin B1 changes the gene expression and signal transduction pathways in monkey kidney cells. Fumonisin B1 increases the initial disruption of sphingolipid metabolism and the accumulation of sphinganine in LLC-PK1 kidney cells. Which causes DNA damage of apoptotic type in rat astrocytes [3].

Solubility Information

Solubility	Methanol: 10 mg/mL (13.85 mM) (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.385 mL	6.927 mL	13.854 mL
5 mM	0.277 mL	1.385 mL	2.771 mL
10 mM	0.139 mL	0.693 mL	1.385 mL
50 mM	0.028 mL	0.139 mL	0.277 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference

1. Henry MH, et al. The toxicity of fumonisin B1, B2, and B3, individually and in combination, in chicken embryos. Poult Sci. 2001 Apr;80(4):401-7.
2. Shephard GS, et al. Disruption of sphingolipid metabolism in non-human primates consuming diets of fumonisin-containing Fusarium moniliforme culture material. Toxicon. 1996 May;34(5):527-34.
3. Wang SK, et al. Effect of fumonisin B on the cell cycle of normal human liver cells. Mol Med Rep. 2013 Jun;7(6):1970-6.

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