

**Product Name:** Fumonisin B1

**Product Number:** F030

**CAS Number:** 116355-83-0

**Molecular Formula:**  $C_{34}H_{59}NO_{15}$

**Molecular Weight:** 721.8

**Appearance:** Light tan powder

**Storage Conditions:** -20°C

**Description:** Fumonisin B1 is a major analogue of a family of potent mycotoxins produced by various *Fusarium* species, associated with animal toxicity worldwide. In vitro, fumonisin B1 inhibits sphingosine N-acyl-transferase (ceramide synthase) and blocks the growth of axons.

Fumonisin B1 is soluble in ethanol, methanol, DMF or DMSO. Poor water solubility.

**References:** Structure elucidation of the fumonisins, mycotoxins from *Fusarium moniliforme*. Bezuidenhout S. C. et al. J. Chem. Soc. Chem. Commun. 1988, 743.

Inhibition of sphingolipid biosynthesis by fumonisins. Implications for diseases associated with *Fusarium moniliforme*. Wang E. et al. J. Biol. Chem. 1991, 266, 14486.

Inhibition of sphingolipid synthesis affects axonal outgrowth in cultured hippocampal neurons. Harel R. & Futerman A. H. J. Biol. Chem. 1993, 268, 14476.

Fumonisin B1 inhibits sphingosine (sphinganine) N-acyltransferase and de novo sphingolipid biosynthesis in cultured neurons in situ. Merrill A. H. et al. J. Biol. Chem. 1993, 268, 27299.