

LKT Laboratories, Inc.

Hydrolyzed Fumonisin B1

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Product Information

Product ID H965142
CAS No. 145040-09-1

Chemical Name

Synonym Aminopentol; AP1

Formula $C_{22}H_{47}NO_5$
Formula Wt. 405.61

Melting Point

Purity $\geq 99\%$ by ELSD

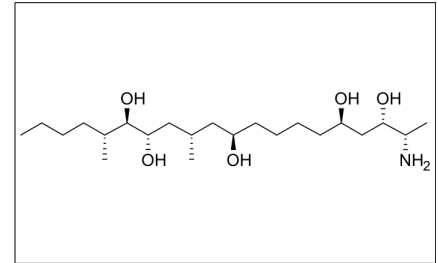
Solubility

Store Temp $-20^{\circ}C$

Ship Temp Ambient

Description

Hydrolyzed fumonisin B1 is a mycotoxin produced by *Fusarium* fungi that infect many cereal grains and other foods. Because of the high frequency and concentration of contamination, fumonisins are likely to have an impact on human and animal health. Fumonisin B1, B2, and B3 each have regulated limits set for corn in both the EU and US. Epidemiologic studies have associated fumonisins with the occurrence of human oesophageal cancer and neural tube defects. Hydrolyzed fumonisin B1 is a less toxic metabolite of fumonisin B1.



Pricing and Availability

Bulk quantities available upon request

Product ID	Size	List Price
H965142	100 μ g	\$157.50
H965142	1 mg	\$1207.50

References Masching S, Naehrer K, et al. Gastrointestinal degradation of fumonisin B1 by carboxylesterase FumD prevents fumonisin induced alteration of sphingolipid metabolism in turkey and swine. *Toxins (Basel)*. 2016 Mar 21;8(3):pii:E84. PMID: 27007395.

Humpf HU, Schmelz EM, Meredith FI, et al. Acylation of naturally occurring and synthetic 1-deoxysphinganine by ceramide synthase. Formation of N-palmitoyl-aminopentol produces a toxic metabolite of hydrolyzed fumonisin, AP1, and a new category or ceramide synthase inhibitor. *J Biol Chem*. 1998 Jul 24;273(30):19060-19064. PMID: 9668088.

Matsuo Y, Takahara K, Sago Y, et al. Detection of N-(1-deoxy-D-fructos-1-yl) fumonisins B2 and B3 in corn by high-resolution LC-orbitrap MS. *Toxins (Basel)*. 2015 Sep 16;7(9):3700-3714. PMID: 26389955.

Tamura M, Mochizuki N, Nagatomi Y, et al. A method for simultaneous determination of 20 *Fusarium* toxins in cereals by high-resolution liquid chromatography-orbitrap mass spectrometry with a pentafluorophenyl column. *Toxins (Basel)*. 2015 May 14;7(5):1664-1682. PMID: 26008230.

Yoshinari T, Tanaka T, Ichikuro E, et al. Inter-laboratory study of LC-MS/MS method for simultaneous determination of fumonisin B1, B2 and B3 in corn. *Shokuhin Eiseigaku Zasshi*. 2013;54(4):266-276. PMID: 24025204.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.