

# Fumonisin B<sub>1</sub>

## Ceramide synthase inhibitor

Fumonisin B1 (FB1) is a mycotoxin produced by *Fusarium moniliforme*. FB1 inhibits sphingosine N-acyl-transferase (ceramide synthase) ( $IC_{50} = 0.1\mu M$ ) and *de novo* sphingolipid biosynthesis ( $IC_{50} = 0.7\mu M$  for sphingomyelin labeling by  $[3H]$ sphinganine, cultured cerebellar neurons). FB1 inhibits growth of axons in cultured hippocampal neurons by blocking glycosphingolipid synthesis. In CV-1 cells, FB1 induces DNA damage ( $5\mu M$ ) and apoptosis ( $25\mu M$ ). FB1 also activates Akt (PKB), which leads to increased survival, inhibition of GSK-3 $\beta$  activity, and post-translational stabilization of cyclin D1.

Citations: 16

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## Ordering Information

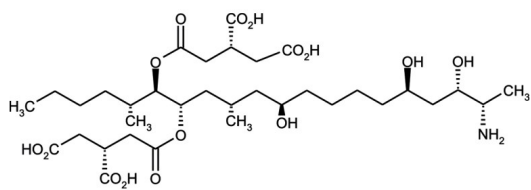
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BML-SL220-0001	1mg
BML-SL220-0005	5mg

## Manuals, SDS & CofA

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- Highly pure sphingosine n-acyl transferase inhibitor
- Used in a variety of research fields including cancer, food science, and neuroscience



## Handling & Storage

Use/Stability	As indicated on product label or CoA when stored as recommended. Stable for at least 1 year after receipt when stored, as supplied, at -20°C. Stock solutions are stable for up to 3 months at -20°C.
Long Term Storage	-20°C
Shipping	Ambient Temperature

## Regulatory Status

RUO - Research Use Only

## Product Details

Alternative Name	FB1
Appearance	White to off-white solid.
CAS	116355-83-0
Couple Target	Akt, GSK
Couple Type	Activator, Inhibitor
Formula	$C_{34}H_{59}NO_{15}$
Identity	Identity determined by NMR.
MI	14: 4289
MW	721.8
Purity	≥98% (HPLC, TLC)
Solubility	Soluble in water (25mg/ml).
Source	Isolated from <i>Fusarium moniliforme</i> .

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