

Enniatin B1

## PRODUCT DATA SHEET

Code No.: BIA-E1168

Pack sizes: 1 mg, 5 mg



Synonyms

2-(N-Methyl-L-isoleucine)enniatin B

Specifications		
CAS #	:	19914-20-6
Molecular Formula	:	C <sub>34</sub> H <sub>59</sub> N <sub>3</sub> O <sub>9</sub>
Molecular Weight	:	653.9
Source	:	Fusarium sp.
Appearance	:	White powder
Purity	:	>99% by HPLC
Long Term Storage	:	-20°C
Solubility	:	Soluble in ethanol, methanol, DMF or DMSO. Poor water solubility.

## **Application Notes**

Enniatins are a family of depsipeptide ionophores, produced several Fusarium species. More recently, the effects of the enniatins on acyl-CoA cholesterol transferase, transporters and the selectivity of their antitumour action have received more focus. Enniatin B1 is one of four major analogues of the enniatin complex and has not previously been available for investigation.

## References

- 1. Ionophore antibiotics produced by the fungus Fusarium orthoceras var. enniatum and other Fusaria. Gaumann E. et al., Experientia 1947, 3, 202.
- "Sandwich" complexation in cyclopeptides and its implications in membrane processes. Ivanov V.T. Ann. N. Y. Acad. Sci. 1975, 264, 221.
- 3. Interaction of cyclic peptides and depsipeptides with calmodulin. Mereish K.A. et al., Pept. Res. 1990, 3, 233.
- Enniatin has a new function as an inhibitor of Pdr5p, one of the ABC transporters in Saccharomyces cerevisiae. Hiraga K. et al., Biochem. Biophys. Res. Commun. 2005, 328, 1119.
- 5. Enniatin exerts p53-dependent cytostatic and p53-independent cytotoxic activities against human cancer cells. Dornetshuber R. et al., Chem. Res. Toxicol. 2007, 20, 465.

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