

PRODUCT DATA SHEET

Code No.: BIA-E1168

Pack sizes: 1 mg, 5 mg

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

Specifications

Enniatin B1

CAS # : 19914-20-6 Molecular Formula : $C_{34}H_{59}N_3O_9$ Molecular Weight : 653.9

Source : Fusarium sp.

Appearance : White powder

Purity : >95% 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 by several Fusarium species. Recently, the effects of the enniatins on acyl-CoA cholesterol transferase, transporters and the selectivity of their antitumor action have received more focus. Enniatin B1 is one of four major analogues of the enniatin complex.

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.
- 4. 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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