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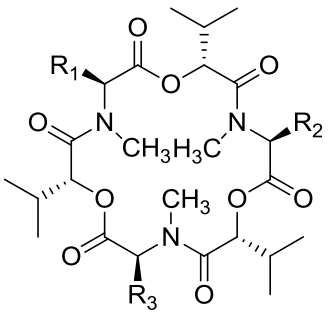
PRODUCT DATA SHEET

Enniatin complex

Code No.: **BIA-E1071**

Pack sizes: **10 mg, 50 mg**



	R_1	R_2	R_3
A	s-Bu	s-Bu	s-Bu
A_1	i-Pr	s-Bu	s-Bu
B	i-Pr	i-Pr	i-Pr
B_1	i-Pr	i-Pr	s-Bu
C	i-Bu	i-Bu	i-Bu
D	i-Pr	i-Pr	i-Bu
E	i-Pr	s-Bu	i-Bu
F	s-Bu	s-Bu	i-Bu

Synonyms :

Specifications

CAS #	:	**11113-62-5**
Molecular Formula	:	**$C_{33}H_{57}N_3O_9$ (for B)**
Molecular Weight	:	**639.8**
Source	:	***Fusarium* sp.**
Appearance	:	**White to off 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 complex of depsipeptides produced by several Fusarium species. Typically, the complex contains 4 major components: A, A1, B and B1 together with minor amounts of enniatins C, D, E and F. The enniatins act as ionophores. Recently their effects on acyl-CoA cholesterol transferase, as nematocides and the selectivity of their antitumor action have received more focus.

References

1. Ionophore antibiotics produced by the fungus Fusarium orthoceras var. enniatum and other Fusaria. Gaumann E. et al., Experientia 1947, 3, 202.
2. "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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