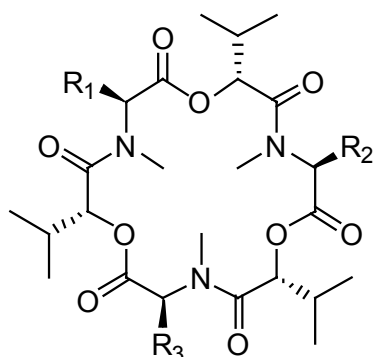


Enniatin complex

Code: **BIA-E1071**

Pack size: **10 mg, 50 mg**



	R ₁	R ₂	R ₃	MWt
A	s-Bu	s-Bu	s-Bu	681.9
A ₁	i-Pr	s-Bu	s-Bu	667.8
B	i-Pr	i-Pr	i-Pr	639.8
B ₁	i-Pr	i-Pr	s-Bu	653.9
C	i-Bu	i-Bu	i-Bu	681.9
D	i-Pr	i-Pr	i-Bu	653.9
E	i-Pr	s-Bu	i-Bu	667.9
F	s-Bu	s-Bu	i-Bu	681.9

Synonyms :

Specifications

CAS #	: 11113-62-5
Molecular Formula	: C₃₃H₅₇N₃O₉ (Based on Enniatin B as the major component)
Molecular Weight	: 639.8
Source	: <i>Fusarium</i> sp. MST-FP1765
Appearance	: White to off white powder
Purity	: > 95% by HPLC
Long Term Storage	: - 20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO.

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 enniatin C, D, E and F. The enniatins have been shown to 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.