

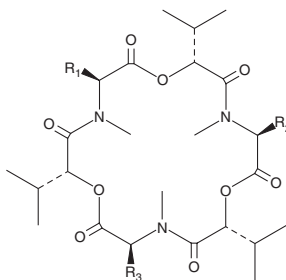
PRODUCT INFORMATION



Enniatin Complex

Item No. 9002040

CAS Registry No.: 11113-62-5
MF: $C_{33}H_{57}N_3O_9$ (for B)
FW: 639.8
Purity: $\geq 95\%$
Supplied as: A solid
Storage: -20°C
Stability: ≥ 4 years
Item Origin: Fungus/*Fusarium* sp.



	R ₁	R ₂	R ₃
A:	s-Bu	s-Bu	s-Bu
A1:	i-Pr	s-Bu	s-Bu
B:	i-Pr	i-Pr	i-Pr
B1:	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

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Enniatin complex is supplied as a solid. A stock solution may be made by dissolving the enniatin complex in the solvent of choice. Enniatin complex is soluble in organic solvents such as ethanol, DMSO, dimethyl formamide, and methanol, which should be purged with an inert gas.

Description

Enniatin complex is a mixture of cyclohexadepsipeptides, commonly isolated from fungi, that act as ionophores, forming pores in cellular membranes to allow selective ion transport.^{1,2} The complex typically contains the major components: A (Item No. 17456), A1 (Item No. 17457), B (Item No. 15382), and B1 (Item No. 17245) together with minor amounts of enniatin C, D, E, and F.¹ Enniatins exhibit antimicrobial activity against a variety of eukaryotic and prokaryotic genera, inhibit acyl-CoA:cholesterol acyltransferase, and induce apoptosis in several cancer lines.^{1,3-6}

References

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2. Kamyar, M.R., Rawnduzi, P., Studenik, C.R., et al. Investigation of the electrophysiological properties of enniatins. *Arch. Biochem. Biophys.* **429**(2), 215-223 (2004).
3. Tomoda, H., Huang, X.H., Cao, J., et al. Inhibition of acyl-CoA: Cholesterol acyltransferase activity by cyclodepsipeptide antibiotics. *J. Antibiot. (Tokyo)* **45**(10), 1626-1632 (1992).
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5. Dornetshuber, R., Heffeter, P., Kamyar, M.R., et al. Enniatin exerts p53-dependent cytostatic and p53-independent cytotoxic activities against human cancer cells. *Chem. Res. Toxicol.* **20**(3), 465-473 (2007).
6. Hiraga, K., Yamamoto, S., Fukuda, H., et al. Enniatin has a new function as an inhibitor of Pdr5p, one of the ABC transporters in *Saccharomyces cerevisiae*. *Biochem. Biophys. Res. Commun.* **328**(4), 1119-1125 (2005).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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