# **PRODUCT** INFORMATION



## **Enniatin A**

Item No. 17456

CAS Registry No.: Formal Name:	2503-13-1 cyclo[(2R)-2-hydroxy-3-methylbutanoyl-N-methyl- L-isoleucyl-(2R)-2-hydroxy-3-methylbutanoyl- N-methyl-L-isoleucyl-(2R)-2-hydroxy-3- methylbutanoyl-N-methyl-L-isoleucyl]	
MF:	$C_{36}H_{63}N_3O_9$	
FW:	681.9	
Purity:	≥99%	``H    О
Supplied as:	A solid	
Storage:	-20°C	
Stability:	≥4 years	1
Item Origin:	Fungus/Fusarium sp.	

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

#### Laboratory Procedures

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

#### Description

Enniatins are cyclohexadepsipeptides commonly isolated from fungi that are known to have antibiotic properties and to induce apoptosis in several cancer lines.<sup>1</sup> Many function as ionophores, forming pores in cellular membranes to allow selective ion transport.<sup>1,2</sup> Enniatin A is one of four major analogs in the enniatin complex (Item No. 9002040). It has been shown to moderately inhibit acyl-CoA:cholesterol acyltranferase activity in rat liver microsomes with an IC\_{50} value of 22  $\mu\text{M.}^3$  Enniatin A also demonstrates anthelmintic properties against N. brasiliensis, T. spiralis, and H. spumosa.

#### References

- 1. Sy-Cordero, A.A., Pearce, C.J., and Oberlies, N.H. Revisiting the enniatins: A review of their isolation, biosynthesis, structure determination and biological activities. J. Antibiot. (Tokyo) 65(11), 541-549 (2012).
- 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).
- Tomoda, H., Huang, X.H., Cao, J., et al. Inhibition of acyl-CoA: Cholesterol acyltransferase activity by 3. cyclodepsipeptide antibiotics. J. Antibiot. (Tokyo) 45(10), 1626-1632 (1992).

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.

#### WARRANTY AND LIMITATION OF REMEDY

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