



LKT Laboratories, Inc.

## Enniatin A

Phone: 888-558-5227  
651-644-8424  
Fax: 888-558-7329  
Email: [getinfo@lktlabs.com](mailto:getinfo@lktlabs.com)  
Web: [lktlabs.com](http://lktlabs.com)

### Product Information

**Product ID** E537332

**CAS No.** 2503-13-1

**Chemical Name** (3S,9S,12R,15S,18R)-9,15-bis[(2S)-butan-2-yl]-3-[(2R)-butan-2-yl]-4,10,16-trimethyl-6,12,18-tri(propan-2-yl)-1,7,13-trioxa-4,10,16-triazacyclooctadecane-2,5,8,11,14,17-hexone

**Synonym** Fusafungine, cyclo[N(Me)Ile-D-OVal-N(Me)Ile-DL-OVal-N(Me)alle-D-OVal]

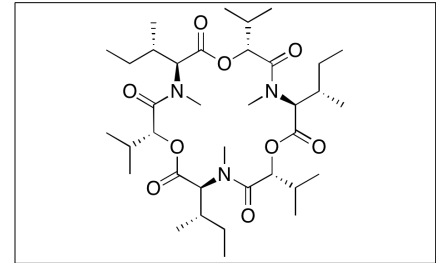
**Formula** C<sub>36</sub>H<sub>63</sub>N<sub>3</sub>O<sub>9</sub>

**Formula Wt.** 681.91

**Melting Point** 121-125°C

**Purity** ≥97%

**Solubility** Soluble in ethanol, methanol, DMSO, DMF. Insoluble in water.



**Bulk quantities available upon request**

Product ID	Size
E537332	1 mg
E537332	5 mg

**Store Temp** -20°C

**Ship Temp** Ambient

**Description** Enniatins are a group of mycotoxins produced by several fungal species. They are cyclic hexadepsipeptides structurally related to beauvericin. They may be found as contaminants in food commodities, particularly in cereal grains. Enniatins are found to have a variety of biological activities including insecticidal, antifungal, antibiotic and cytotoxic properties. They have been shown to induce apoptosis in several human cancer cell lines and are gaining interest as potential anticancer drugs.

**References** Liuzzi VC, Mirabelli V, Cimmarusti MT, et al. Enniatin and beauvericin biosynthesis in *Fusarium* species: production profiles and structural determinant prediction. *Toxins (Basel)*. 2017 Feb;9(2):45. PMID: 28125067.

Gunter AB, Hermans A, Bosnich W, et al. Protein engineering of *Saccharomyces cerevisiae* transporter Pdr5p identifies key residues that impact *Fusarium* mycotoxin export and resistance to inhibition. *Microbiologyopen*. 2016 Dec;5(6):979-991. PMID: 27263049.

Nazari F, Sulyok M, Kobarfard F, et al. Evaluation of emerging mycotoxins beauvericin, enniatins, fusaroliferin and moniliformin in domestic rice in Iran. *Iran J Pharm Res*. 2015 Spring;14(2):505-512. PMID: 25901158.

Dornetshuber-Fleiss R, Heilos D, Mohr T, et al. The naturally born fusariotoxin enniatin B and sorafenib exert synergistic activity against cervical cancer in vitro and in vivo. *Biochem Pharmacol*. 2015 Feb 1;93(3):318-331. PMID: 25557295.

**Caution:** This product is intended for laboratory and research use only. It is not for human or drug use.