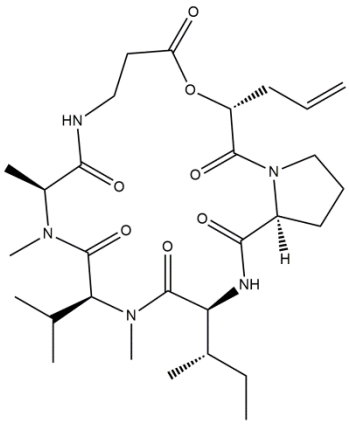
Destruxin A

ALTERNATE NAMES: 3-(butan-2-yl)-5,8,9-trimethyl-6-(propan-2-yl)-16-(prop-2-en-1-yl)dodecahydropyrrolo[1,2-d][1,4,7,10,13,16]oxapentaazacyclononadecine-1,4,7,10,14,17(11h,16h)-hexone; (3S,6S,9S,16R,21aS)-16-Allyl-3-[(2S)-2-butanyl]-6-isopropyl-5,8,9-trimethyldodecahydropyrrolo[1,2-d][1,4,7,10,13,16]oxapentaazacyclononadecine-1,4,7,10,14,17(11H,16H)-hexone; NSC361126

CATALOG #:
B2947-500 500 µg
B2947-1000 1000 µg

STRUCTURE:



MOLECULAR FORMULA: $C_{29}H_{47}N_5O_7$

MOLECULAR WEIGHT: 577.71

CAS NUMBER: 6686-70-0

APPEARANCE: Solid

PURITY: ≥96%

SOLUBILITY: 10 mg/ml in DMSO

DESCRIPTION: Destruxin A is a cyclic hexadepsipeptide metabolite from the fungus *Metarhizium anisopliae*. Destruxins show insecticidal, anti-viral, and phytotoxic properties. Destruxin A suppresses the Drosophila humoral immune response in *Drosophila melanogaster*. It increases peptidoglycan recognition protein (PGRP), prophenoloxidase (proPO) system and affects diverse pathways, including apoptosis, calcium signaling, and development in the larvae of *Plutella xylostella*.

STORAGE TEMPERATURE: -20ºC. Store in the dark. Product is light sensitive. Protect from air. Store under desiccating conditions.

HANDLING: Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

REFERENCES:

1. Han, P., Jin, F., Dong, X., et al. Transcript and protein profiling analysis of the Destruxin A-induced response in larvae of Plutella xylostella. PLoS One 8(4), (2013).
2. Pal, S., St.Leger, R.J., and Wu, L.P. Fungal peptide Destruxin A plays a specific role in suppressing the innate immune response in Drosophila melanogaster. J.Biol.Chem. 282(12), 8969-8977 (2007).

RELATED PRODUCTS:

Sclerotiorin (Cat. No. 2334)
Beauvericin (Cat. No. B1246)
Anomalin A (Cat. No. 2151)
Amphotericin B, USP (Cat. No. 2497)
Fusidic acid (Cat. No. B2392)

DISCLAIMER: ***FOR RESEARCH USE ONLY! Not to be used on humans.***