



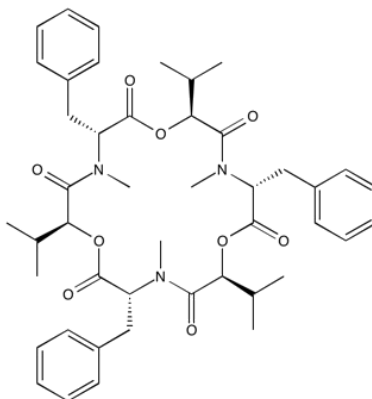
## Catalog # 10-2061

### Beauvericin

CAS# 26048-05-5

Cyclo[(2R)-2-hydroxy-3-methylbutanoyl-N-methyl-L-phenylalanyl-(2R)-2-hydroxy-3-methylbutanoyl-N-methyl-L-phenylalanyl-(2R)-2-hydroxy-3-methylbutanoyl-N-methyl-L-phenylalanyl]

Lot # X101832



Induces apoptosis in A549 cancer cells.<sup>1</sup> Disrupts mitochondrial volume regulation.<sup>2</sup> Antifungal activity acting via inhibition of both multidrug efflux and TORC1 kinase.<sup>3</sup> Crosses the blood-brain barrier in mice.<sup>4</sup> Inhibits HIV-1 integrase.<sup>5</sup>

- 1) Lu *et al.* (2016), *Beauvericin-induced cell apoptosis through the mitogen-activated protein kinase pathway in human nonsmall cell lung cancer A549 cells.*; J. Toxicol. Sci., **41** 429
- 2) Tonshin *et al.* (2010), *The Fusarium mycotoxins enniatins and beauvericin cause mitochondrial dysfunction by affecting the mitochondrial volume regulation, oxidative phosphorylation and ion homeostasis.*; Toxicology, **276** 49
- 3) Shekhar-Guturja *et al.* (2016), *Dual action antifungal small molecule modulates multidrug efflux and TOR signaling*; Nat. Chem. Biol., **12** 867
- 4) Taevernier *et al.* (2016), *Blood-brain barrier transport kinetics of the cyclic depsipeptide mycotoxins beauvericin and enniatins*; Toxicol. Lett., **258** 175
- 5) Shin *et al.* (2009), *Beauvericin and enniatins H,I and MK1688 are new potent inhibitors of human immunodeficiency virus type-1 integrase*; J. Antibiot. (Tokyo), **62** 687

### PHYSICAL DATA

Molecular Weight: 783.95  
Molecular Formula: C<sub>45</sub>H<sub>57</sub>N<sub>3</sub>O<sub>9</sub>  
Purity: 98% by HPLC  
NMR: (Conforms)  
Solubility: Soluble in DMSO (up to 30 mg/ml)  
Physical Description: White solid  
Storage and Stability: Store as supplied, desiccated at -20°C for up to 1 year from the date of purchase.  
Solutions in DMSO may be stored at -20°C for up to 3 months.

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