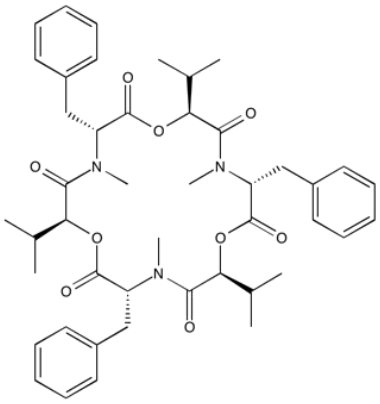
Catalog # 10-2061
Beauvericin

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.[1] Disrupts mitochondrial volume regulation.[2] Antifungal activity acting via inhibition of both multidrug efflux and TORC1 kinase.[3] Crosses the blood-brain barrier in mice.[4] Inhibits HIV-1 integrase.[5]

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:	$C_{45}H_{57}N_3O_9$
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.

Focus Biomolecules LLC 400 Davis Drive, Suite 600 Plymouth Meeting PA 19462
www.focusbiomolecules.com