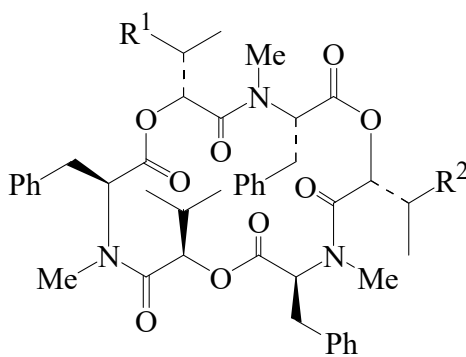




>>Entry Name: Beauvericin



Beauvericin $R^1 = R^2 = \text{CH}_3$
Beauvericin A $R^1 = -\text{CH}_2\text{CH}_3$, $R^2 = \text{CH}_3$
Beauvericin B $R^1 = R^2 = -\text{CH}_2\text{CH}_3$

CAS Registry Number: 26048-05-5

Molecular Formula: $\text{C}_{45}\text{H}_{57}\text{N}_3\text{O}_9$

Molecular Weight: 783.96

Accurate Mass: 783.409482

Percentage Composition: C 68.94%; H 7.33%; N 5.36%; O 18.37%

General Statement: Cyclic depsipeptide antibiotic

Biological Source: Isol. from *Beauveria bassiana*, *Paecilomyces fumoso-roseus*, *Fusarium proliferatum* and *Polyporus sulphureus*

Use/Importance: Acyl-Co A: cholesterol acyltransferase inhibitor. Antifungal agent, active against insects. Induces apoptosis *via* elevation of cytoplasmic Ca

Physical Description: Needles (MeOH aq.)

Melting Point: Mp 93-94°. Mp 147-148° (dimorph)

Optical Rotation: $[\alpha]_D^{25} +65.8$ (c, 1 in MeOH)

Solubility: BERDY SOL: Sol. MeOH, Et₂O; fairly sol. hexane; poorly sol. H₂O

Calculated Log P Data: Log P 9.57 (uncertain value) (calc)

UV: [neutral] λ_{max} 204 (ϵ 13600); 248 (ϵ 1320); 256 (ϵ 1140); 263 (ϵ 870) (EtOH) (Derep) [neutral] λ_{max} 204 (ϵ 13550); 248 (ϵ 1320); 256 (ϵ 1140); 263 (ϵ 870) (EtOH) (Berdy)

Other Data: Readily forms complexes with alkali metals (K-specific ionophore)

Sigma: B7510

>>Variant: Beauvericin A

CAS Registry Number: 165467-50-5

Molecular Formula: $\text{C}_{46}\text{H}_{59}\text{N}_3\text{O}_9$

Molecular Weight: 797.987

Accurate Mass: 797.425132

Percentage Composition: C 69.24%; H 7.45%; N 5.27%; O 18.04%

General Statement: Cyclic depsipeptide antibiotic

Biological Source: Prod. by *Beauveria bassiana*

Biological Use/Importance: Insecticide

Solubility: BERDY SOL: Sol. CHCl₃, MeOH

UV: [neutral] λ_{max} 205 (); 260 (sh) () (MeCN aq.) [neutral] λ_{max} 205 () (MeCN aq.) (Berdy)

>>Variant: Beauvericin B

CAS Registry Number: 165467-51-6

Molecular Formula: $\text{C}_{47}\text{H}_{61}\text{N}_3\text{O}_9$

Molecular Weight: 812.014

Accurate Mass: 811.440782

Percentage Composition: C 69.52%; H 7.57%; N 5.17%; O 17.73%

General Statement: Cyclic depsipeptide antibiotic

Biological Source: Prod. by *Beauveria bassiana*

Biological Use/Importance: Insecticide

Solubility: BERDY SOL: Sol. CHCl₃, MeOH

UV: [neutral] λ_{max} 205 (); 260 (sh) () (MeCN aq.) [neutral] λ_{max} 205 () (MeCN aq.) (Berdy)

References: