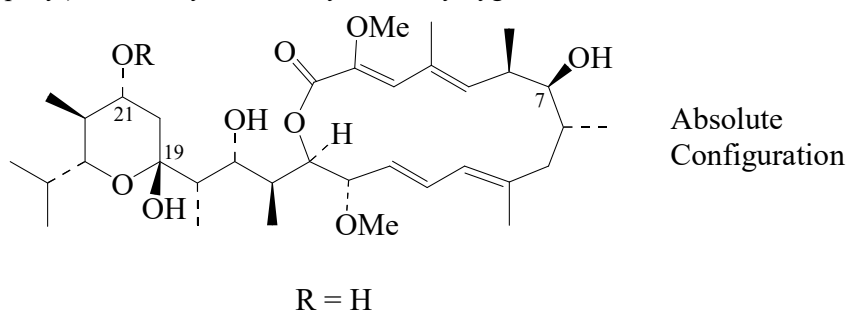




>>Entry Name: Bafilomycin A₁

Synonym(s): 21-*O*-De(3-carboxy-1-oxo-2-propenyl)-2-demethyl-2-methoxy-21-methylhygrolidin



CAS Registry Number: 88899-55-2

Molecular Formula: C₃₅H₅₈O₉

Molecular Weight: 622.838

Accurate Mass: 622.408085

Percentage Composition: C 67.50%; H 9.39%; O 23.12%

General Statement: Macrolide antibiotic

Biological Source: Prod. by *Streptomyces griseus* ssp. *sulphuris*

Use/Importance: Active against gram-positive bacteria, yeasts and fungi

Physical Description: Amorph. powder

Melting Point: Mp 103-106 dec.°

Solubility: BERDY SOL: Sol. MeOH, CHCl₃; poorly sol. H₂O, hexane

UV: [neutral] λ_{max} 245 (ε 25000); 280 (ε 12100) (MeOH) (Derep) [neutral] λ_{max} 245 (ε 25000); 280 (ε 12100) (MeOH) (Berdy)

Sigma: B8281

>>Derivative: *O*²¹-Ac

Synonym(s): Bafilomycin D₁

CAS Registry Number: 88899-58-5

Source/Synthesis: Semisynthetic

Use/Importance: Shows some antibiotic activity

>>Derivative: *O*⁷,*O*²¹-Di-Ac

Synonym(s): Bafilomycin D₁

CAS Registry Number: 88899-57-4

Source/Synthesis: Semisynthetic

Use/Importance: Shows some antibiotic activity

>>Derivative: *O*²¹-(α-L-Rhamnopyranoside)

CAS Registry Number: 96892-75-0

Molecular Formula: C₄₁H₆₈O₁₃

Molecular Weight: 768.98

Accurate Mass: 768.465995

Percentage Composition: C 64.04%; H 8.91%; O 27.05%

Biological Source: Prod. by *Streptomyces olivaceus*

Use/Importance: Shows antifungal props.

Physical Description: Powder

Melting Point: Mp 128-131°

Optical Rotation: [α]_D²⁴ -39.2 (c, 1.83 in CH₂Cl₂)

Solubility: BERDY SOL: Sol. MeOH, CH₂Cl₂, CHCl₃; poorly sol. H₂O, hexane

UV: [neutral] λ_{max} 248 (ε 23500); 287 (ε 10500) (MeOH) (Derep) [neutral] λ_{max} 248 (ε 26900); 288 (ε 15900) (EtOH) (Berdy)