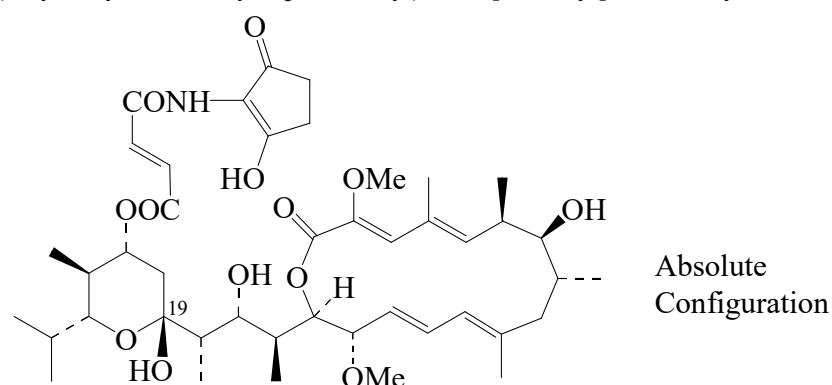




>>Entry Name: Bafilomycin B₁

Synonym(s): 37-Decarboxy-2-demethyl-37-[[[(2-hydroxy-5-oxo-1-cyclopenten-1-yl)amino]carbonyl]-2-methoxy-24-methylhygrolidin. Setamycin



CAS Registry Number: 88899-56-3

Related CAS Registry Numbers(s): 80112-34-1

Molecular Formula: C₄₄H₆₅NO₁₃

Molecular Weight: 815.996

Accurate Mass: 815.445594

Percentage Composition: C 64.77%; H 8.03%; N 1.72%; O 25.49%

General Statement: Macrolide antibiotic

Biological Source: Prod. by *Streptomyces griseus* sp. *sulphurus*. Also isol. from actinomycete strain KM-6054 and *Kitasatosporia setae*

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

Physical Description: Yellow amorph. powder

Melting Point: Mp 134-135° (Setamycin). Mp 89-96 dec.°

Optical Rotation: $[\alpha]_D^{28} +18.3$ (c, 1 in MeOH)

UV: [acid] $\lambda_{\max}$ (no shifts reported) (Derep) [base] $\lambda_{\max}$ (no shifts reported) (Derep) [neutral] $\lambda_{\max}$ 248 (ϵ 35000); 285 (sh) (ϵ 21600); 355 (ϵ 12500) (MeOH) (Derep)

>>Derivative: O¹⁹-Me

Synonym(s): Bafilomycin B₂

CAS Registry Number: 88907-48-6

Molecular Formula: C₄₅H₆₇NO₁₃

Molecular Weight: 830.023

Accurate Mass: 829.461244

Percentage Composition: C 65.12%; H 8.14%; N 1.69%; O 25.06%

Source/Synthesis: Formed during isolation procedure

Use/Importance: Inactive

Solubility: BERDY SOL: Sol. MeOH, Me₂CO; poorly sol. H₂O, hexane

UV: [neutral] $\lambda_{\max}$ 209 (ϵ 24170); 246 (ϵ 32870); 283 (ϵ 14120) (MeOH) (Berdy)

References:

- Omura, S. *et al.*, *J. Antibiot.*, 1981, **34**, 1253; 1633, (*Setamycin, isol, uv, ir, pmr*)
Werner, G. *et al.*, *Tet. Lett.*, 1983, **24**, 5193, (*Bafilomycin*)
Ger. Pat., 1984, 3 310 533; *CA*, **102**, 22799, (*Bafilomycin*)
Werner, G. *et al.*, *J. Antibiot.*, 1984, **37**, 110, (*Bafilomycin*)
Otogura, K. *et al.*, *J. Antibiot.*, 1988, **41**, 250, (*Setamycin, struct, props*)
O'Shea, M.G. *et al.*, *J. Antibiot.*, 1997, **50**, 1073-1077, (*abs config*)