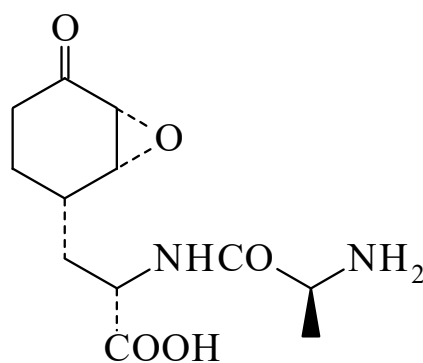




>>Entry Name: Bacilysin

Synonym(s): *N*-Alanyl-3-(5-oxo-7-oxabicyclo[4.1.0]hept-2-yl)alanine, 9Cl. Bacillin. Tetaine. KM 208. Antibiotic KM 208



Absolute
configuration

CAS Registry Number: 29393-20-2

Molecular Formula: C₁₂H₁₈N₂O₅

Molecular Weight: 270.285

Accurate Mass: 270.121573

Percentage Composition: C 53.33%; H 6.71%; N 10.36%; O 29.60%

General Statement: Peptide antibiotic

Biological Source: Prod. by *Bacillus subtilis* and *Bacillus pumilus*

Use/Importance: Active against gram-positive and -negative bacteria

Physical Description: Amorph. solid

Optical Rotation: $[\alpha]_D^{20} +103$ (c, 0.643 in H₂O)

pKa Value: pK_{a1} 3; pK_{a2} 8.2 (20°, NH₂, H₂O)

UV: [neutral] $\lambda_{\max}$ 0 (end) (ϵ) (MeOH) (Derep)

References:

Roscoe, J. *et al.*, *Biochem. J.*, 1966, **99**, 793, (*biosynth*)

Walker, J.E. *et al.*, *Biochem. J.*, 1970, **118**, 557; 563, (*struct, ir, ms, pmr*)

Astumi, K. *et al.*, *J. Antibiot.*, 1975, **28**, 77

Koenig, M. *et al.*, *J. Gen. Microbiol.*, 1976, **94**, 37; 46, (*props*)

Crossley, M.J. *et al.*, *Aust. J. Chem.*, 1993, **46**, 1443, (*abs config*)

Wild, H., *J.O.C.*, 1994, **59**, 2748, (*synth, struct*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, BAC175