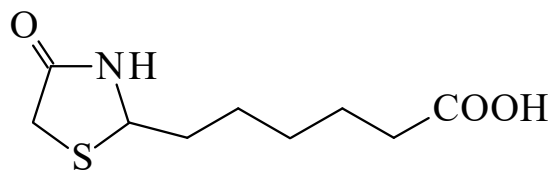




>>Entry Name: Acidomycin

Synonym(s): 4-Oxo-2-thiazolidinehexanoic acid, 9Cl. 2-(5-Carboxypentyl)-4-thiazolidone, 8Cl. Actithiazic acid. Cinnamonin. Mycobacin. Thiazolidomycin. PA 95. Antibiotic 6604-4. Antibiotic PA 95



CAS Registry Number: 539-35-5

Related CAS Registry Numbers(s): 28223-69-0

Molecular Formula: C₉H₁₅NO₃S

Molecular Weight: 217.288

Accurate Mass: 217.077264

Percentage Composition: C 49.75%; H 6.96%; N 6.45%; O 22.09%; S 14.76%

General Statement: Amino acid derived antibiotic

Calculated Log P Data: Log P 0.86 (calc)

Hazard & Toxicity: LD₅₀ (mus, ipr) 2500 mg/kg

>>Variant: (–)-form

Molecular Formula: C₉H₁₅NO₃S

Molecular Weight: 217.288

Accurate Mass: 217.077264

Percentage Composition: C 49.75%; H 6.96%; N 6.45%; O 22.09%; S 14.76%

Biological Source: Prod. by *Streptomyces* spp.

Use/Importance: Active against mycobacteria *in vitro*

Physical Description: Needles (H₂O, MeOH or Me₂CO)

Melting Point: Mp 139-140°

Optical Rotation: [α]_D²³ –54 (MeOH). [α]_D²⁵ –60 (c, 1 in EtOH)

Solubility: BERDY SOL: Sol. MeOH, CHCl₃, bases; fairly sol. CH₂Cl₂; poorly sol. H₂O, acids, hexane, C₆H₆

UV: [neutral] λ_{max} 245 () (MeOH) (Berdy)

Other Data: Blue fluor. in uv light. Racemised by dil. alkalis

Hazard & Toxicity: BERDY HAZD : LD₅₀ (mus, ivn) 1500 mg/kg , LD₅₀ (mus, ipr) 2500 mg/kg , LD₅₀ (mus, scu) 20000 mg/kg

>>Derivative: Me ester

Molecular Formula: C₁₀H₁₇NO₃S

Molecular Weight: 231.315

Percentage Composition: C 51.92%; H 7.41%; N 6.06%; O 20.75%; S 13.86%

Physical Description: Needles

Melting Point: Mp 53-54°

Optical Rotation: [α]_D²⁵ –50.9 (MeOH)

>>Variant: (±)-form

CAS Registry Number: 106448-99-1

Molecular Formula: C₉H₁₅NO₃S

Molecular Weight: 217.288

Accurate Mass: 217.077264

Percentage Composition: C 49.75%; H 6.96%; N 6.45%; O 22.09%; S 14.76%

Physical Description: Needles (H₂O or CHCl₃)

Melting Point: Mp 122-123° (116-117°)

References:

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Sobin, B.A., *J.A.C.S.*, 1952, **74**, 2947, (*isol*)

Miyake, A. *et al.*, *Pharm. Bull.*, 1953, **1**, 84, (*isol, struct*)

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Caltrider, P.G., *Antibiotics (N.Y.)*, 1967, **1**, 666, (*rev*)

Lokshin, G.B. *et al.*, *Antibiotiki (Moscow)*, 1970, **15**, 14, (*isol*)

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