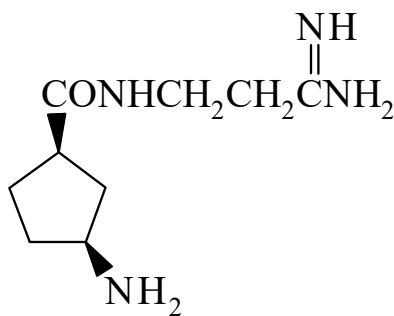




>>Entry Name: Amidinomycin

Synonym(s): *N*-(2-Amidinoethyl)-3-aminocyclopentanecarboxamide. Myxoviromycin



CAS Registry Number: 3572-60-9

Related CAS Registry Numbers(s): 19946-52-2

Molecular Formula: C₉H₁₈N₄O

Molecular Weight: 198.267

Accurate Mass: 198.148061

Percentage Composition: C 54.52%; H 9.15%; N 28.26%; O 8.07%

Biological Source: Prod. by *Streptomyces flavochromogenes*

Use/Importance: Antifungal antiviral agent. Antineoplastic antibiotic

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

Calculated Log P Data: Log P -2.26 (uncertain value) (calc)

UV: [acid] λ_{max} 205 (ε 4460) (0.1*N* HCl) (Derep) [base] λ_{max} 219 (ε 1580) (0.1*N* NaOH) (Derep) [neutral] λ_{max} 212 (ε 1170) (pH 3 H₂O) (Derep) [neutral] λ_{max} 212 (E1%/1cm 59) (H₂O) (Berdy) [acid] λ_{max} 205 (E1%/1cm 225) (HCl) (Berdy) [base] λ_{max} 219 (E1%/1cm 79) (NaOH) (Berdy)

Hazard & Toxicity: LD₅₀ (mus, orl) 140 mg/kg ; BERDY HAZD : LD₅₀ (mus, ivn) 18 mg/kg , LD₅₀ (mus, ipr) 200 mg/kg

>>Derivative: Sulfate

Physical Description: Plates or needles (MeOH aq.)

Melting Point: Mp 285-288 dec.°

Optical Rotation: [α]_D²¹ -3.9 (c, 3 in H₂O)

References:

- Nakamura, S. *et al.*, *Chem. Pharm. Bull.*, 1961, **9**, 641, (*synth, struct*)
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Katsube, J. *et al.*, *Chem. Pharm. Bull.*, 1968, **16**, 232, (*synth, ir, pmr*)
Allan, R.D. *et al.*, *Aust. J. Chem.*, 1979, **32**, 2517, (*synth, struct*)
Kaneda, M. *et al.*, *J. Antibiot.*, 1980, **33**, 778, (*cryst struct, abs config*)
Sapse, A.M. *et al.*, *J. Biomol. Struct. Dyn.*, 1993, **10**, 709, (*conformn*)
Chenevert, R. *et al.*, *Chem. Lett.*, 1994, 93, (*synth, abs config*)