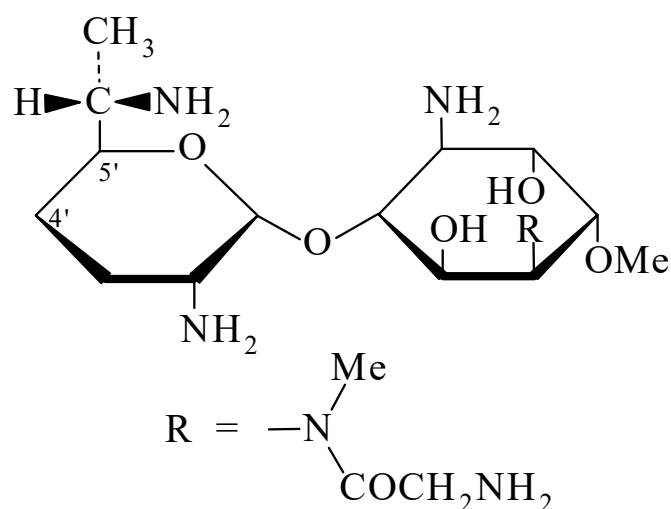




>>Entry Name: Fortimicin A

Synonym(s): Astromicin, INN. Abbott 44747. KW 1070. XK 70-1. Antibiotic KW 1070



CAS Registry Number: 55779-06-1

Related CAS Registry Numbers(s): 66768-12-5

Molecular Formula: $C_{17}H_{35}N_5O_6$

Molecular Weight: 405.493

Accurate Mass: 405.258735

Percentage Composition: C 50.36%; H 8.70%; N 17.27%; O 23.67%

General Statement: Aminoglycoside antibiotic

Biological Source: Isol. from *Micromonospora* spp.

Use/Importance: Antibacterial agent

Physical Description: Amorph. powder

Development Status: Launched 1985

Melting Point: Mp 200 dec.°

Optical Rotation: $[\alpha]_D^{25} +87.5$ (c, 0.1 in H_2O)

Solubility: BERDY SOL: Sol. H_2O ; fairly sol. MeOH, Me_2CO , EtOH; poorly sol. butanol, hexane, EtOAc

Calculated Log P Data: Log P -2.99 (uncertain value) (calc)

UV: [neutral] λ_{max} 0 (end) (ϵ) (H_2O) (Derep) [neutral] λ_{max} (H_2O) (Berdy)

Hazard & Toxicity: LD₅₀ (mus, orl) 13600 mg/kg. Exp. reprod. and teratogenic effects (large doses) ; BERDY HAZD : LD₅₀ (mus, ivn) 380 mg/kg

>>Derivative: Sulfate (2:1)

Synonym(s): Astromicin sulfate, JAN, USAN

CAS Registry Number: 77275-67-3

>>Derivative: N⁶-Formyl

Synonym(s): Antibiotic SF 1854. SF 1854

CAS Registry Number: 74228-81-2

Molecular Formula: $C_{18}H_{35}N_5O_7$

Molecular Weight: 433.504

Accurate Mass: 433.25365

Percentage Composition: C 49.87%; H 8.14%; N 16.16%; O 25.84%

Biological Source: From *Micromonospora* sp. SF-1854

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

Optical Rotation: $[\alpha]_D^{25} +67$ (c, 1 in H_2O)

Solubility: BERDY SOL: Sol. H_2O ; poorly sol. butanol, hexane

UV: [neutral] λ_{max} (H_2O) (Berdy)