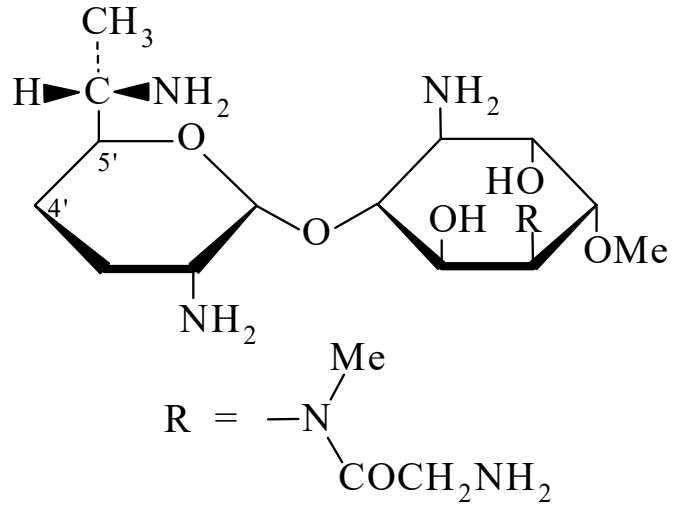
>>**Entry Name: Fortimicin A**
**Synonym(s): Astromicin,** INN. Abbott 44747. KW 1070. XK 70-1. Antibiotic KW 1070




**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] $\lambda_{max}$ 0 (end) (ε ) ($H_2O$) (Derep) [neutral] $\lambda_{max}$ ($H_2O$) (Berdy)
**Hazard & Toxicity:** $LD_{50}$ (mus, orl) 13600 mg/kg. Exp. reprod. and teratogenic effects (large doses) ; BERDY HAZD : $LD_{50}$ (mus, ivn) 380 mg/kg

>>**Derivative:** Sulfate (2:1)
**Synonym(s): Astromicin sulfate,** JAN, USAN

**CAS Registry Number:** 77275-67-3

>>**Derivative:** $N^{\omega}$-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] $\lambda_{max}$ ($H_2O$) (Berdy)