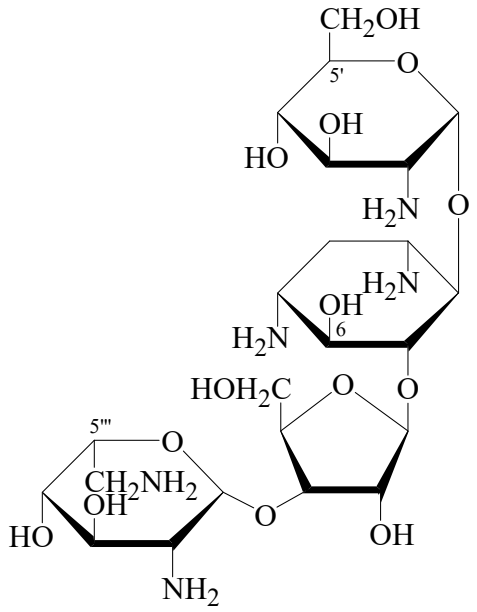
>>**Entry Name: Paromomycin,** BAN, INN
Synonym(s): Aminosidine I. Catenulin. Gabbromycin. Humaycin. Hydroxymycin. Monomycin. Neomycin E. Paramomycin I. Quintomycin C. Zygomycin A_1. 2230D. SF 767B. Antibiotic 2230D. Antibiotic SF 767B. Antibiotic 4915. Many other names



CAS Registry Number: 7542-37-2
Related CAS Registry Numbers(s): 59-04-1 1405-10-3 54597-56-7

Molecular Formula: $C_{23}H_{45}N_5O_{14}$
Molecular Weight: 615.634
Accurate Mass: 615.296305
Percentage Composition: C 44.87%; H 7.37%; N 11.38%; O 36.38%

Biological Source: Produced by *Streptomyces rimosus paramomycinus*
Biological Use/Importance: Shows broad spectrum antibiotic activity. Amoebicide. Anticryptosporidial activity, used in AIDS patients. Tuberculostat
Physical Description: Amorph. solid
Optical Rotation: $[\alpha]_D^{25}$+65 (c, 1 in H_2O)
Calculated Log P Data: Log P –9.11 (uncertain value) (calc)
Hazard & Toxicity: Gastrointestinal, ototoxic, and nephrotoxic effects reported when used therapeutically. LD_{50} (mus, orl) 2275 mg/kg. LD_{50} (mus, ipr) 930 mg/kg

>>**Derivative:** Hydrochloride

Optical Rotation: $[\alpha]_D^{25}$+56.5 (c, 1 in H_2O)

>>**Derivative:** Sulfate
Synonym(s): Paromomycin sulfate, JAN, USAN**.** Gabroral. Humatin

CAS Registry Number: 1263-89-4
Optical Rotation: $[\alpha]_D^{25}$+50.5 (c, 1.5 in H_2O)
Hazard & Toxicity: LD_{50} (mus, orl) 23500 mg/kg

Fluka: 76261
Sigma: P5057

>>**Derivative:** N^1-Ac
Synonym(s): N^1-Acetylparomomycin I

Molecular Formula: $C_{25}H_{47}N_5O_{15}$
Molecular Weight: 657.671
Accurate Mass: 657.30687
Percentage Composition: C 45.66%; H 7.20%; N 10.65%; O 36.49%
Biological Source: Isol. from *Streptomyces circulatus*
Use/Importance: Active against gram-positive and -negative bacteria
Solubility: BERDY SOL: Sol. H_2O; fairly sol. MeOH, EtOH; poorly sol. butanol, hexane
UV: [neutral] λ_{max} (H_2O) (Berdy)