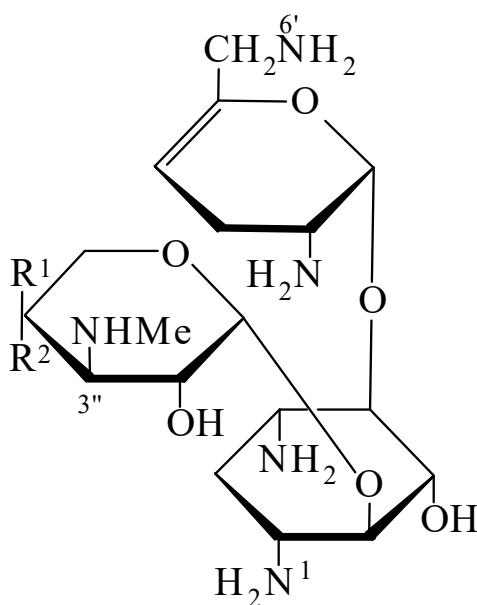




>>Entry Name: Sisomicin, INN, USAN

Synonym(s): Sissomicin, BAN. Rickamicin. Antibiotic 6640. Many other names



CAS Registry Number: 32385-11-8

Related CAS Registry Numbers(s): 79056-20-5

AF4400

Molecular Formula: $\text{C}_{19}\text{H}_{37}\text{N}_5\text{O}_7$

Molecular Weight: 447.531

Accurate Mass: 447.2693

Percentage Composition: C 50.99%; H 8.33%; N 15.65%; O 25.03%

Biological Source: Isol. from *Micromonospora inyoensis*

Use/Importance: Shows broad-spectrum activity. Similar to Gentamicins

Physical Description: Cryst. + H_2O (EtOH)

Melting Point: Mp 198-201°

Optical Rotation: $[\alpha]_{\text{D}}^{26} +189$ (c, 0.3 in H_2O)

Solubility: BERDY SOL: Sol. H_2O ; fairly sol. MeOH, CHCl_3 ; poorly sol. Me_2CO , hexane

Calculated Log P Data: Log P -4.65 (uncertain value) (calc)

UV: [neutral] λ_{max} (H_2O) (Berdy)

Hazard & Toxicity: Renal and otological effects reported when used therapeutically. LD_{50} (mus, scu) 288 mg/kg. Exp. reprod. effects ; BERDY HAZD : LD_{50} (mus, ivn) 34 mg/kg , LD_{50} (mus, ipr) 221 mg/kg , LD_{50} (mus, scu) 288 mg/kg

>>Derivative: Sulfate (1:2.5)

Synonym(s): Sisomicin sulfate, JAN, USAN. Siseptin

CAS Registry Number: 53179-09-2

Hazard & Toxicity: LD_{50} (rat, scu) 500 mg/kg; LD_{50} (mus, scu) 272 mg/kg

Sigma: S8757

>>Derivative: Penta-Ac

Molecular Formula: $\text{C}_{20}\text{H}_{39}\text{N}_5\text{O}_7$

Molecular Weight: 461.557

Accurate Mass: 461.28495

Percentage Composition: C 52.05%; H 8.52%; N 15.17%; O 24.26%

Physical Description: Amorph. powder

Melting Point: Mp 185-190°

Optical Rotation: $[\alpha]_{\text{D}}^{26} +194.6$ (MeOH)