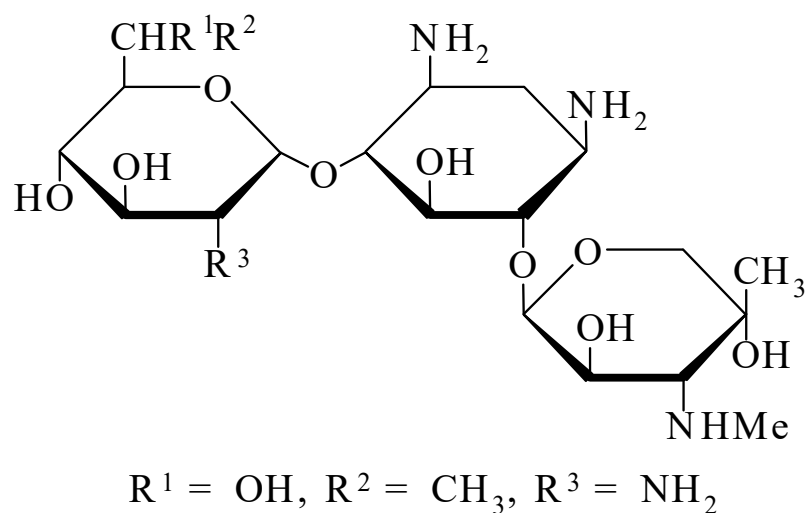




>>Entry Name: Gentamicin G 418

Synonym(s): Geneticin. Gentiomycin G 418. G 418. Antibiotic G 418



CAS Registry Number: 49863-47-0

Related CAS Registry Numbers(s): 49662-05-7

Molecular Formula: $\text{C}_{20}\text{H}_{40}\text{N}_4\text{O}_{10}$

Molecular Weight: 496.557

Accurate Mass: 496.274446

Percentage Composition: C 48.38%; H 8.12%; N 11.28%; O 32.22%

Biological Source: Prod. by *Micromonospora* spp.

Use/Importance: Shows broad-spectrum activity

Physical Description: Amorph. powder

Melting Point: Mp 138-144°

Optical Rotation: $[\alpha]_{\text{D}}^{26} +149$ (c, 0.3 in H_2O)

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

UV: [neutral] λ_{max} (H_2O) (Berdy)

Hazard & Toxicity: BERDY HAZD : LD₅₀ (mus, ivn) 140 mg/kg , LD₅₀ (mus, ivn) 260 mg/kg , LD₅₀ (mus, scu) 1000 mg/kg

References:

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Testa, R.T. *et al.*, *J. Antibiot.*, 1975, **28**, 573, (struct)

Daniels, P.J.L. *et al.*, *J.C.S. Perkin 1*, 1976, 1078, (ms)

Berdy, J. *et al.*, *J. Antibiot.*, 1977, **30**, 945, (isol)

Kase, H. *et al.*, *J. Antibiot.*, 1982, **35**, 1, (isol)