Accurate Mass: 449.28495
Percentage Composition: C 50.76%; H 8.74%; N 15.58%; O 24.91%
Solubility: BERDY SOL: Sol. H_2O, AcOH, Py; fairly sol. MeOH; poorly sol. butanol, hexane
UV: [neutral] λ_{max} (H_2O) (Berdy)
Hazard & Toxicity: LD_{50} (mus, ivn) 70 mg/kg

>>**Derivative:** 1-*N*-Et
Synonym(s): 1-*N*-Ethylgentamicin C_{1a}. Antibiotic 89-07

CAS Registry Number: 59711-96-5

Molecular Formula: $C_{21}H_{43}N_5O_7$
Molecular Weight: 477.6
Accurate Mass: 477.31625
Percentage Composition: C 52.81%; H 9.07%; N 14.66%; O 23.45%
Biological Source: Prod. by *Micromonospora echinospora*
Biological Use/Importance: Active against gram-positive and -negative bacteria
Physical Description: Powder
Solubility: BERDY SOL: Sol. H_2O
UV: [neutral] λ_{max} 200 () (H_2O) [neutral] λ_{max} (H_2O) (Berdy)

>>**Derivative:** 3''-*N*-De-Me
Synonym(s): 3''-*N*-Demethylgentamicin C_{1a}

CAS Registry Number: 59864-29-8

Molecular Formula: $C_{18}H_{37}N_5O_7$
Molecular Weight: 435.52
Accurate Mass: 435.2693
Percentage Composition: C 49.64%; H 8.56%; N 16.08%; O 25.72%
Biological Source: Prod. by *Micromonospora sagamiensis*
Biological Use/Importance: Active against gram-positive and -negative bacteria
Physical Description: Powder
Solubility: BERDY SOL: Sol. H_2O
UV: [neutral] λ_{max} 200 () (H_2O) [neutral] λ_{max} (H_2O) (Berdy)

>>**Derivative:** 4''-Demethyl
Synonym(s): 4''-Demethylgentamicin C_{1a}

CAS Registry Number: 61769-70-8

Molecular Formula: $C_{18}H_{37}N_5O_7$
Molecular Weight: 435.52
Accurate Mass: 435.2693
Percentage Composition: C 49.64%; H 8.56%; N 16.08%; O 25.72%
Biological Source: From *Micromonospora purpurea-nigrescens*
Use/Importance: Active against gram-positive and -negative bacteria, and mycobacteria
Optical Rotation: $[\alpha]_D$ +144 (H_2O)
Solubility: BERDY SOL: Sol. H_2O; fairly sol. MeOH; poorly sol. butanol, hexane
UV: [neutral] λ_{max} (H_2O) (Berdy)

>>**Variant: Gentamicin C_2**

CAS Registry Number: 25876-11-3
Molecular Formula: $C_{20}H_{41}N_5O_7$
Molecular Weight: 463.573
Accurate Mass: 463.3006
Percentage Composition: C 51.82%; H 8.91%; N 15.11%; O 24.16%
Melting Point: Mp 107-124°
Optical Rotation: $[\alpha]_D^{25}$+160 (H_2O)
Solubility: BERDY SOL: Sol. H_2O, AcOH, Py; fairly sol. MeOH; poorly sol. butanol, hexane
UV: [neutral] λ_{max} (H_2O) (Berdy)
Hazard & Toxicity: LD_{50} (mus, ivn) 70 mg/kg ; BERDY HAZD : LD_{50} (mus, ivn) 83 mg/kg