Accurate Mass: 589.332295
Percentage Composition: C 52.96%; H 8.03%; N 11.88%; O 27.13%
Melting Point: Mp 206-222°
Optical Rotation: $[\alpha]_D^{25}$ +151 (MeOH)

>>**Derivative:** 3"-*N*-De-Me
see Antibiotic Y 02077Hγ, CKZ77-I

>>**Derivative:** 6'-Epimer
Synonym(s): Gentamicin C_{2a}

CAS Registry Number: 59751-72-3

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%
Biological Source: From *Micromonospora* spp.
Solubility: BERDY SOL: Sol. H_2O; poorly sol. Me_2CO, hexane
UV: [neutral] λ_{max} (H_2O) (Berdy)

>>**Derivative:** 4"-Demethyl
Synonym(s): 4''-Demethylgentamicin C_2

CAS Registry Number: 66277-10-9

Molecular Formula: $C_{19}H_{39}N_5O_7$
Molecular Weight: 449.546
Accurate Mass: 449.28495
Percentage Composition: C 50.76%; H 8.74%; N 15.58%; O 24.91%
Biological Source: From *Micromonospora purpurea-nigrescens*
Use/Importance: Active against gram-positive and -negative bacteria, and mycobacteria
Optical Rotation: $[\alpha]_D$ +148 (H_2O)

>>**Variant: Gentamicin C_{2b}**
Synonym(s): Micronomicin, INN, JAN**.** Sagamicin. Santemycin. KW 1062. XK 62-2. Antibiotic KW 1062. Antibiotic XK 62-2

CAS Registry Number: 52093-21-7

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%
Physical Description: Amorph. solid + ½ H_2O
Melting Point: Mp 260 dec.°
Optical Rotation: $[\alpha]_D$ +116 (c, 1 in H_2O)
Calculated Log P Data: Log P –4.08 (uncertain value) (calc)
Hazard & Toxicity: LD_{50} (mus, orl) 15600 mg/kg. Exp. reprod. and teratogenic effects (large dose)

>>**Derivative:** 3"-*N*-De-Me
Synonym(s): 3''-*N*-Demethylsagamicin. XK 62-5. Antibiotic XK 62-5

CAS Registry Number: 59864-28-7

Molecular Formula: $C_{19}H_{39}N_5O_7$
Molecular Weight: 449.546
Accurate Mass: 449.28495
Percentage Composition: C 50.76%; H 8.74%; N 15.58%; O 24.91%
Biological Source: From *Micromonospora sagamiensis nonreducans*
Physical Description: Powder
Solubility: BERDY SOL: Sol. H_2O, MeOH; fairly sol. EtOH, Me_2CO; poorly sol. butanol, hexane
UV: [neutral] λ_{max} (H_2O) (Berdy)