

Gentamycin (sulphate) #GAB08.0005

(for research only)

Product: Gentamycin is an aminoglycoside antibiotic complex comprised of 3 major

components (C1, C1a, and C2). It inhibits protein synthesis by binding to the 30S subunit of the ribosome. It is a broad-spectrum antibiotic with activity

against Gram (+) and Gram (-) bacteria, and mycoplasmas.

Quantity: 5g

Appearance: white or slightly yellow needle crystals or crystalline solid

Storage: 2°C–8°C for at least to 3 years.

Preparation: Prepare a stock solution of 50mg/ml in ultrapure water, and filter sterilize. Do

not autoclave. Store stock solution at 2°C-8°C.

Usage: For incorporation in agar plates or broth, add chloramphenicol to a final

concentration of 50µg/ml by adding to autoclaved media agar, just prior to

pouring the plates, or to broth after cooling down to room temperature.

Specifications:

Composition:

Gentamycin C1: 25 - 50% Gentamycin C1a: 10 - 35% Gentamycin C2: 25 - 55%

Formulas:

Gentamycin C1: $C_{21}H_{43}N_5O_7$ (Mw=477,6g/mol) Gentamycin C1a: $C_{19}H_{39}N_5O_7$ (Mw=449,5g/mol) Gentamycin C2: $C_{20}H_{41}N_5O_7$ (Mw=463,6g/mol)

Potency: >590µg/mg (on dry basis)

Water content: <18%

Specific optical rotation: +107° to +121°

Solubility (H₂O): 50mg/ml

H₃C HO HO NH₂

Structure of Gentamycin 2

ORDERING INFORMATION – Molecular Cloning – Common Reagents

Reference #	Product Name	Quantity
GAB01.0005	IPTG (max 5 ppm dioxane)	5 g
GAB02.0005	X-Gal	5 g
GAB03.0005	Ampicillin (sodium salt)	5 g
GAB04.0005	Kanamycin (sulphate)	5 g
GAB05.0005	Chloramphenicol	5 g
GAB06.0005	Carbenicillin (disodium salt)	5 g
GAB07.0005	Tetracycline (hydrochloride)	5 g
GAB08.0005	Gentamycin powder	5 g

GRiSP Research Solutions

Rua Alfredo Allen, 455 4200-135 Porto Portugal www.grisp.pt | info@grisp.pt