

Gentamicin Sulfate

Molecular structure

Product Description

Gentamicin, also known as gentiomycin C, is an aminoglycoside, which is naturally produced by Gramnegative bacteria. This antibiotic functions by preventing protein synthesis. Gentamicin sulfate prevents the growth of both Gram positive and Gram negative bacteria, *in vivo* and *in vitro*. In tissue culture, gentamicin sulfate is used to inhibit the growth of various strains of mycoplasma.

Product Specification

Mode of Action: Gentamicin causes codon misreading by binding to the 30S ribosomal

subunit, blocking the translocation of peptidyl-tRNA from the acceptor

site to the donor site. The bactericidal effect of gentamicin on

Pseudomonas aeruginosa is exerted by the binding of gentamicin to the outer membrane, where it displaces natural cations, destabilizes the

membrane, and forms holes in the cell surface.

Conferred Resistance: high-level aminoglycoside *resistance* in gram-negative bacteria

Molecular weight: 575.64

Formula: $C_{21}H_{43}N_5O_7 \bullet H_2SO_4$

Appearance: Liquid: yellow liquid

Powder: off white powder

Working Concentration: Powder: 50 μg/mL

Liquid: 1 mL/Litre

Solubility: Powder: H₂0



Storage and Stability: Liquid: 15°C to 30°C

Powder: 2°C to 8°C Protect from light

Ordering information

Cat. No.	Description	Unit Size	Qty/Pk
30-005 CR	Gentamicin Sulfate liquid 50 mg/mL solution	10 x 10 mL	1
61-098 RA	Gentamicin Sulphate Powder	0.1 g	1
61-098-RF	Gentamicin Sulphate Powder	1 g	1

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Support

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