

Kanamycin Sulfate

Molecular structure

Product Description

Kanamycin sulfate is a broad spectrum aminoglycoside-antibiotic derived from Streptomyces kanamyceticus. It binds to the 70S ribosomal subunit, inhibits translocation, and elicits miscoding. Kanamycin sulfate can also be used as a selection agent for *cells* transformed with kanamycin B resistance gene. It is suitable for use in plant cell culture.

Product Specification

Mode of Action: Kanamycin works by interfering with protein synthesis. It binds to the 30S

subunit of the bacterial ribosome. This results in incorrect alignment with the mRNA and eventually leads to a misread that causes the wrong amino

acid to be placed into the peptide.

Conferred Resistance: the common component of most GM crops is the neomycin

phosphotransferase II gene (nptII), which confers resistance to the antibiotics kanamycin and neomycin. The nptII gene is present in GM crops as a marker gene to select transformed plant cells during the first

steps of the transformation process.

Molecular weight: 582.6g/mol

Formula: $C_{18}H_{38}N_4O_{15}S$

Appearance: Liquid: yellow liquid

Powder: off white powder

Working Concentration: Powder: 50 μg/mL

Liquid: 10mL/Litre



Solubility: Powder: H₂O

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

Liquid: -15°C to -25°C Protect from light

Ordering information

Cat. No.	Description	Unit Size	Qty/Pk
30-006 CF	Kanamycin Sulfate liquid 5000μg/mL solution	6 x 50 mL	1
61-176 RG	KanamycinSulphate Powder	5g	1

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Support

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