

DATA SHEET

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> Kanamycin Monosulphate

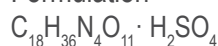
cat. no.	amount	note
STS-KANA 5	5g	powder
STS-KANA 10	10g	powder
STS-KANA 25	25g	powder

Kanamycin sulfate is an aminoglycoside antibiotic isolated from *Streptomyces kanamyceticus* and active against most Gram-negative bacteria. Kanamycin is incorporated into sensitive bacterial cells by an active transport process. Kanamycin binds to the 30S subunit, and to some extent the 50S subunit too, of the bacterial ribosome, thereby inhibiting protein synthesis and generating errors in the transcription of the genetic code.

Kanamycin is used in molecular biology as a selective agent most commonly to isolate bacteria (e.g. *E. coli*) that have taken up genes (e.g., of plasmids) coupled to a gene coding for Kanamycin resistance (primarily Neomycin phosphotransferase II [NPT II/Neo]). Bacteria that have been transformed with a plasmid containing the Kanamycin resistance gene are plated on kanamycin (typically 50 mg/L)-containing agar plates or are grown in media containing kanamycin (50 mg/L). Only the bacteria that have successfully taken up the Kanamycin resistance gene become resistant and will grow under these conditions.

Plant cell culture tested.

Formulation



Molecular weight

582,6

Solubility

As a powder kanamycin is white to off-white and is soluble in water (50mg/ml).

Storage

Store at ROOM TEMPERATURE

FOR RESEARCH USE ONLY