



## Product Information

**Product ID** K0053

**CAS No.** 25389-94-0

**Chemical Name** D-Streptamine, O-3-amino-3-deoxy-alpha-D- glucopyranosyl-(1-6)-O-(6-amino-6-deoxy-alpha-D- glucopyranosyl-(1-4))-2-deoxy-

**Synonym** Kanamycin

**Formula**  $C_{18}H_{36}N_4O_{11} \cdot H_2SO_4$

**Formula Wt.** 582.58

**Melting Point**

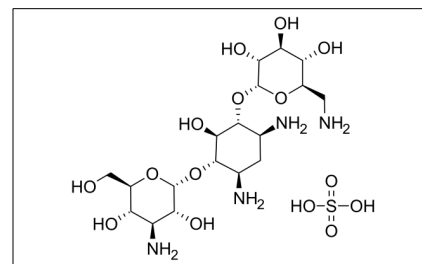
**Purity**  $\geq 98\%$

**Solubility** Soluble in water (100mM) or alcohol.

**Store Temp** Ambient

**Ship Temp** Ambient

**Description** Kanamycin A is an aminoglycoside antibiotic that binds the bacterial 16s rRNA subunit, inhibiting translocation and degrading target RNA; it displays antibacterial efficacy against gram negative bacteria. Kanamycin also prevents formation of the initiation complex. Kanamycin A also inhibits mammalian RNA splicing.



**Bulk quantities available upon request**

Product ID	Size
K0053	1 g
K0053	5 g
K0053	25 g

**References** Romanowska J, Reuter N, Trylska J. Comparing aminoglycoside binding sites in bacterial ribosomal RNA and aminoglycoside modifying enzymes. *Proteins*. 2013 Jan;81(1):63-80. PMID: 22907688.

Patwardhan A, Cowan JA. Influence of charge and structure on the coordination chemistry of copper aminoglycosides. *Dalton Trans*. 2011 Feb 28;40(8):1795-801. PMID: 21218243.

Aukema KG, Chohan KK, Plourde GL, et al. Small molecule inhibitors of yeast pre-mRNA splicing. *ACS Chem Biol*. 2009 Sep 18;4(9):759-68. PMID: 19634919.

**Caution:** This product is intended for laboratory and research use only. It is not for human or drug use.