



## Product Information

**Product ID** A5132

**CAS No.** 39831-55-5

**Chemical Name** O-3-Amino-3-deoxy- $\alpha$ -D-glucopyranosyl-(1 $\rightarrow$ 6)-O- [6-amino-6-deoxy- $\alpha$ -D-glucopyranosyl-(1 $\rightarrow$ 4)]-N1- [(2S)-4-amino-2-hydroxy-1-oxobutyl]-2-deoxy-D- streptomine sulfate

**Synonym** Amikacin sulfate, Amikin, Biklin, Lukadin, Mikavir, Novamin, Pierami

**Formula**  $C_{22}H_{43}N_5O_{13} \cdot 2H_2SO_4$

**Formula Wt.** 781.76

**Melting Point** 220-230 $^{\circ}$ C(dec.)

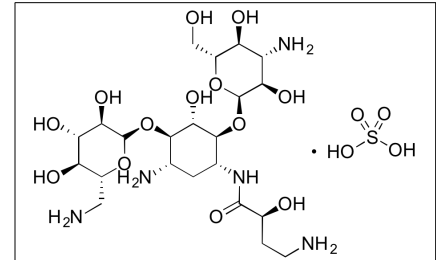
**Purity**  $\geq$ 98%

**Solubility** Soluble in water (50mg/mL). Insoluble in acetone and water. DMSO <1 mg/mL.

**Store Temp** Ambient

**Ship Temp** Ambient

**Description** Amikacin is an aminoglycoside antibiotic that exhibits antibacterial efficacy against gram negative bacteria. Amikacin binds the 30S ribosomal subunit, preventing translation.



**Bulk quantities available upon request**

Product ID	Size
A5132	250 mg
A5132	1 g
A5132	5 g

**References** Barza M, Scheife RT. Drug therapy reviews: Antimicrobial spectrum, pharmacology and therapeutic use of antibiotics--part 4: aminoglycosides. Am J Hosp Pharm. 1977 Jul;34(7):723-37. PMID: 407790.

Kawaguchi H. Discovery, chemistry, and activity of amikacin. J Infect Dis. 1976 Nov;134 SUPPL:S242-8. PMID: 825583.

King P, Citron DM, Griffith DC, et al. Effect of oxygen limitation on the in vitro activity of levofloxacin and other antibiotics administered by the aerosol route against Pseudomonas aeruginosa from cystic fibrosis patients. Diagn Microbiol Infect Dis. 2010 Feb;66(2):181-186. PMID: 19828274.

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