PRODUCT INFORMATION



Kanamycin A (sulfate)

Item No. 15321

CAS Registry No.:	25389-94-0			
Formal Name:	O-3-amino-3-deoxy-α-D-			
	glucopyranosyl- $(1 \rightarrow 6)$ -O-[6-amino-6-	ОН	ОН	ОН
	deoxy- α -D-glucopyranosyl-(1 \rightarrow 4)]-2-			H
	deoxy-D-streptamine, monosulfate	HO		NH ₂
Synonym:	Ophtalmokalixan			
MF:	$C_{18}H_{36}N_4O_{11} \bullet H_2SO_4$	HO H ₂ N	···· NH ₂	ООН
FW:	582.6		-	0.1
Purity:	≥90%	Ż	• H ₂ SO ₄	
Supplied as:	A crystalline solid	H ₂ N ²		`ОН
Storage:	-20°C			
Stability:	≥4 years			
Item Origin:	Synthetic			
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis				

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Laboratory Procedures

Kanamycin A (sulfate) is supplied as a crystalline solid. Aqueous solutions of kanamycin A (sulfate) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of kanamycin A (sulfate) in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Kanamycin A is a broad spectrum antibiotic isolated from a soil streptomyces (S. kanamyceticus). This aminoglycoside alters translation by prokaryotic ribosomes, resulting in bacterial cell death.¹ In molecular biology, kanamycin A is used as a selective agent to isolate transformants that are expressing a kanamycin resistance gene, usually neomycin phosphotransferase (NptII/neo). This mode of selection is most commonly used in plant and mammalian biology.

Reference

1. Misumi, M. and Tanaka, N. Mechanism of inhibition of translocation by kanamycin and viomycin: A comparative study with fusidic acid. Biochem. Biophys. Res. Commun. 92(2), 647-654 (1980).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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