# **PRODUCT** INFORMATION



## Apramycin (sulfate hydrate)

Item No. 19688

Formal Name:	O-4-amino-4-deoxy- $\alpha$ -D-glucopyranosyl- (1 $\rightarrow$ 8)-O-(8R)-2-amino-2,3,7-trideoxy- 7-(methylamino)-D-glycero- $\alpha$ -D-allo- octodialdo-1,5:8,4-dipyranosyl-(1 $\rightarrow$ 4)-	HO HO HO
Synonym:	2-deoxy-D-streptamine, sulfate, hydrate Nebramycin II	H <sub>2</sub> N.
MF: FW:	C <sub>21</sub> H <sub>41</sub> N <sub>5</sub> O <sub>11</sub> ● XH <sub>2</sub> SO <sub>4</sub> [XH <sub>2</sub> O] 539.6	
Purity:	≥95%	HO NH <sub>2</sub> OIT II
Supplied as: Storage: Stability:	A powder -20°C	+NH <sub>2</sub> SO <sub>4</sub> [XH <sub>2</sub> O]
Stability:	≥4 years	2

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

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

#### Description

Apramycin is an aminoglycoside antibiotic first isolated from S. tenebrarius.<sup>1</sup> It is active against a variety of Gram-positive and Gram-negative bacteria, including strains which produce aminoglycoside-modifying enzymes.<sup>2</sup> Apramycin inhibits protein synthesis in bacteria both *in vivo* and *in vitro*.<sup>1</sup>

#### References

- 1. Abe, Y., Nakagawa, S., Naito, T., et al. Aminoglycoside antibiotics. XIV. Synthesis and activity of 6-O-(3amino-3-deoxy-α-D-glucopyranosyl)-and 5-O-(β-D-ribofuranosyl)apramycins. J. Antibiot. (Tokyo) 34(11), 1434-1446 (1981).
- 2. Perzynski, S., Cannon, M., Cundliffe, E., et al. Effects of apramycin, a novel aminoglycoside antibiotic on bacterial protein synthesis. Eur. J. Biochem. 99(3), 623-628 (1979).

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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