

<b>Product Name:</b>	Apramycin Sulfate
<b>Product Number:</b>	A014
<b>CAS Number:</b>	65710-07-8
<b>Molecular Formula:</b>	$C_{21}H_{41}N_5O_{11} \cdot H_2SO_4$
<b>Molecular Weight:</b>	637.66
<b>Form:</b>	Powder
<b>Appearance:</b>	Light yellow powder
<b>Source:</b>	<i>Streptomyces tenebraius</i>
<b>Storage Conditions:</b>	2-8°C
<b>Description:</b>	Apramycin sulfate is an aminoglycoside antibiotic which binds the deep groove of RNA and effectively inhibits ribosomal translocation prohibiting protein synthesis. It is sparingly soluble in water (25 mg/mL).
<b>Mechanism of Action:</b>	Apramycin sulfate binds to the deep groove of RNA and effectively inhibits ribosomal translocation prohibiting protein synthesis.
<b>Spectrum:</b>	Gram negative bacteria such as E. coli and Salmonella spp. demonstrate susceptibility to apramycin sulfate.
<b>Microbiology Applications</b>	<p>Apramycin sulfate is commonly used in clinical <i>in vitro</i> microbiological antimicrobial susceptibility tests (panels, discs, and MIC strips) against gram negative microbial isolates. Medical microbiologists use AST results to recommend antibiotic treatment options for infected patients. Representative MIC values include:</p> <ul style="list-style-type: none"><li>• <i>Escherichia coli</i> 1 µg/mL — &gt;512 µg/mL</li><li>• <i>Klebsiella pneumoniae</i> 2 µg/mL — &gt;256 µg/mL</li><li>• For a complete list of apramycin MIC values, <a href="#">click here</a>.</li></ul>
<b>References:</b>	Davis, Bernard D. "Mechanism of Bactericidal Action of Aminoglycosides." <i>Microbiological Reviews</i> 51.3 (1987): 341-50.