

## Gentamicin Sulfate Salt

### Product Information

Product Name	Cat#	Specification
Gentamicin Sulfate Salt	60214ES03	1 g
	60214ES08	5 g
	60214ES25	25 g

### Product Description

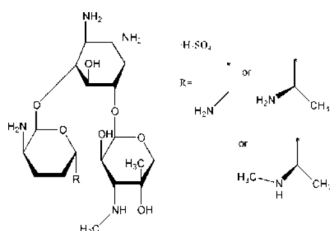
Gentamicin sulfate salt, a broad-spectrum aminoglycoside antibiotic, which has good resistance to many Gram-negative bacteria and Gram-positive bacteria capacity, even some  $\beta$ -Lactam sensitive anti vancomycin (VRE) enterococci, and some "superbacteria" resistant to glycopeptide antibiotics. Its antibacterial mechanism is that it binds to the 30S subunit of bacterial ribosome, leads to codon error, blocks the transport of peptidyl tRNA from site A to site P, and thus inhibits the synthesis of bacterial proteins.

Gentamicin sulfate is widely used in laboratories: 1) microbiological research, which is often used to screen sensitive bacteria in drug sensitivity experiments; 2) Inhibit bacterial contamination in cell culture, with an effective concentration of 0.5 - 50  $\mu\text{g/mL}$ ; 3) Molecular biology research is often used to selectively screen positive clones carrying gentamicin resistance genes, commonly used concentration: 15  $\mu\text{g/mL}$ .

### Product Properties

<b>Synonyms</b>	Garamycin; Gentamicin sulfate; Gentiomycin C
<b>CAS #</b>	1405-41-0
<b>Molecular Weight</b>	575.67 g/mol
<b>Molecular Formula</b>	$\text{C}_{21}\text{H}_{43}\text{N}_5\text{O}_7 \cdot \text{H}_2\text{SO}_4$
<b>Appearance</b>	White to light yellow powder
<b>Potency, dry basis</b>	$\geq 590 \mu\text{g/mg}$
<b>Melting Point</b>	218-237°C
<b>Solubility</b>	Dissolve in water (50 mg/mL), Almost insoluble in organic reagents such as ethanol.

### Structure



### Shipping and Storage

The product component is shipped with ice pack and can be stored at 2-8°C for 2 years. Mother liquor shall be sub packaged and stored at -20°C.

### Cautions

- 1) Gentamicin sulfate itself is not sterile and can only be used after filtration and sterilization. Autoclaving solution is not allowed.
- 2) Gentamicin sulfate is composed of many different gentamicin components. The main components are gentamicin C complex: gentamicin C1, gentamicin C1a. And gentamicin C2, which account for about 80 % and have the highest antibacterial activity.

Gentamicin a, B, X and some other components make up the remaining 20 % of antibiotics, The antibacterial activity was significantly lower than that of gentamicin C complex.

3) For your safety and health, please wear experimental clothes and disposable gloves.

4) This product is only used for scientific research.