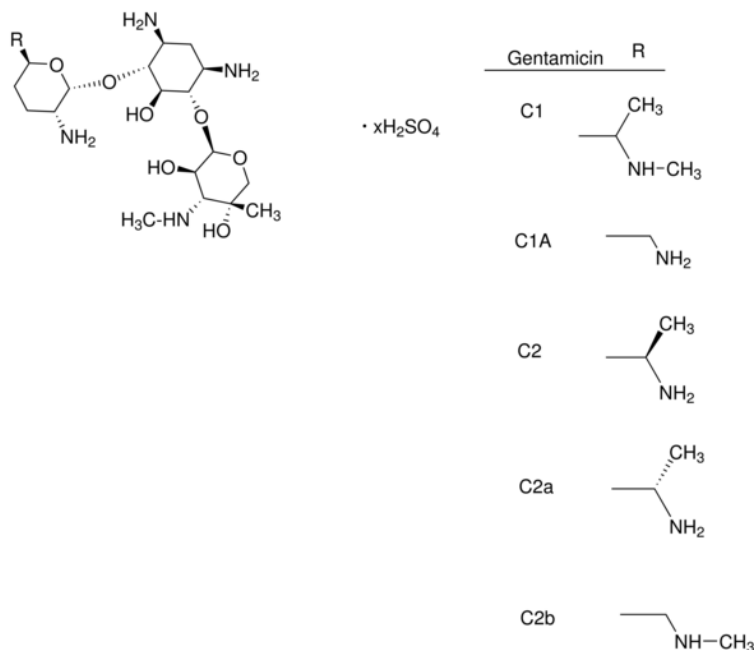


## Gentamicin sulphate

Cat # NB-42-01363-10g size: 10g

Cat # NB-42-01363-25g size: 25g

Cat # NB-42-01363-100g size: 100g



### Product Information

Batch No.:	AS508410
Batch Molecular Weight:	1,530.86 g/mol
CAS No.:	[1405-41-0]
Physical Appearance:	White to almost white powder
Melting Point:	217-237 °C
Storage:	2-8°C

### Solvent and solubility

50 µg/mL in H<sub>2</sub>O (is the recommended working concentration for eukaryotic cell culture)

### Biological activity & Application

Gentamicin sulfate, a broad-spectrum antibiotic, used as a selection agent (gentamicin-resistance gene) in cell culture and molecular biology applications. This product is recommended for use at 50 mg/L.

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**Mode of action:** Gentamicin causes codon misreading by binding to the 30S ribosomal subunit, blocking the translocation of peptidyl-tRNA from the acceptor site to the donor site. The bactericidal effect of gentamicin on *Pseudomonas aeruginosa* is exerted by the binding of gentamicin to the outer membrane, where it displaces natural cations, destabilizes the membrane, and forms holes in the cell surface.

**Antimicrobial spectrum:** Includes Gram-negative and Gram-positive bacteria, including strains resistant to tetracycline, chloramphenicol, kanamycin and colistin, particularly strains of *Pseudomonas*, *Proteus*, *Staphylococcus* and *Streptococcus*.

## Analytical data

ITEMS	SPECIFICATION	RESULTS
Appearance	White to off-white powder	Conforms
PH	3.5-5.5	4.8
Specific optical rotation	+107deg to +121deg	+117deg
Methanol	≤1.0%	Conforms
Composition	C1:25.0% to 50%	26.0%
	C1a:10% to 35%	29.0%
	C2a+C2:25% to 55%	45.0%
Water	≤15%	11.2%
Sulphate ash	≤1.0%	0.3%
Sulphate	32.0% to 35.0%	33.0%
Bacterial endotoxins	≤0.71 IU/mg	Conforms
Assay	Potency equivalent to not less than 590ug of Gentamycine per milligram,calculated on the dry basis (Hydrous substance)	692ug/mg 615ug/mg
Conclusion	Up to the Standard(BP2002/EP4 )	

**Notes:** approx. 650 units/mg  
An aminoglycoside antibiotic  
Cell culture tested

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