

Gentamicin sulfate

Chemical Properties

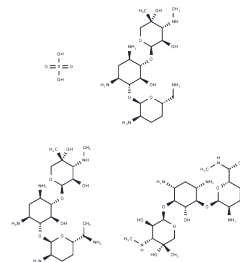
CAS No. : 1405-41-0

Formula:

Molecular Weight:

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



Biological Description

Description	Gentamicin sulfate (SCH9724) is a wide-spectrum, aminoglycoside antibiotic used to inhibit protein synthesis in sensitive organisms.
Targets(IC50)	ribosome,Antibacterial,Antibiotic,DHFR
In vitro	<p>METHODS: Fibroblasts, MDCK and LLC-PK1 cells were treated with Gentamicin sulfate (0-3 mM) for 4 days and apoptosis was detected by TUNEL assay.</p> <p>RESULTS: The incidence of apoptosis was increased in all 3 cell lines, correlating almost directly with the extracellular concentration of Gentamicin sulfate and the incubation time, reaching 20-30% of all cells. [1]</p>
In vivo	<p>Gentamicin is the first choice aminoglycoside for the treatment of serious infections at present, with alternatives being amikacin, netilmicin, and tobramycin. Gentamicin preparations are commercially available in three forms, namely otic, ophthalmic, and topical based on the respective function to treat infections of ear canal, eye, and skin. Oral and injectable forms of gentamicin are found to exhibit effective antibacterial activity against Yersinia pestis as demonstrated in a mouse infection model[4]. Treatment with up to nine doses of methicillin or gentamicin shows an obvious reduction of bacteria on the foreign body[5].</p>

Solubility Information

Solubility	<p>DMSO: Insoluble,</p> <p>H2O: 10 mM,Sonication is recommended.</p> <p>(< 1 mg/ml refers to the product slightly soluble or insoluble)</p>
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Reference

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