

# Certificate of Analysis

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**Product Name:** Gentamicin sulfate

**Catalog No.:** 6442

**Batch No.:** 4

**CAS Number:** 1405-41-0

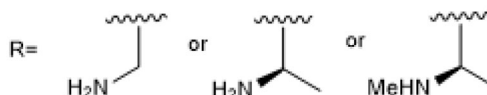
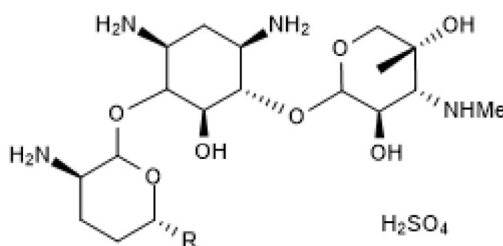
## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Physical Appearance:** White to off-white solid

**Solubility:** water to 100 mg/ml

**Storage:** Store at +4°C

**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**Potency:** 673 IU/mg

**pH (4% in H<sub>2</sub>O):** 5.1

**Bacterial Endotoxins :** <0.71 IU/mg

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

**bio-techne.com**

[info@bio-techne.com](mailto:info@bio-techne.com)

[techsupport@bio-techne.com](mailto:techsupport@bio-techne.com)

**North America**

Tel: (800) 343 7475

**China**

[info.cn@bio-techne.com](mailto:info.cn@bio-techne.com)

Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**

[www.tocris.com/distributors](http://www.tocris.com/distributors)

Tel: +1 612 379 2956

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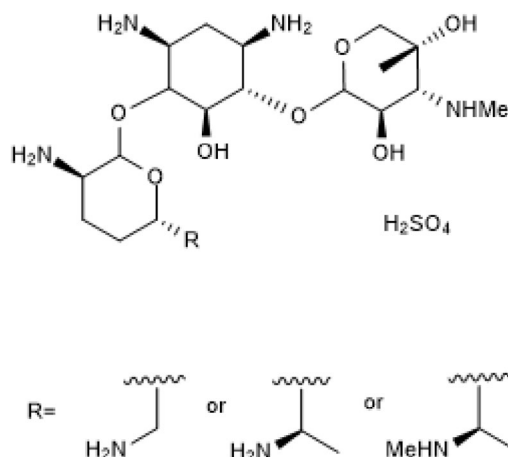
**Description:**

Gentamicin sulfate is an aminoglycoside antibiotic. Irreversibly binds bacterial ribosomes and disrupts protein synthesis. Active against gram-positive and -negative bacteria. Stable over wide range of temperatures. Gentamicin sulfate can be used in a small molecule cocktail to generate 3D culture of lung alveolar cells (see below protocol). For more information about how Gentamicin sulfate may be used, see our protocol: 3D Culture of Lung Alveolar Cells

**Physical and Chemical Properties:**

Physical Appearance: White to off-white solid

**Batch Molecular Structure:**



**Storage:** Store at +4°C

**Solubility & Usage Info:**

water to 100 mg/ml

**Stability and Solubility Advice:**

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. \*Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

**SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

**SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

**References:**

**Schroeder et al** (2000) Modulation of RNA function by aminoglycoside antibiotics. *EMBO.J.* **4** 1. PMID: 10619838.

**Casemore** (1967) Gentamicin as a bactericidal agent in virological tissue cultures. *J.Clin.Pathol.* **20** 298. PMID: 4972293.

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**North America**

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