

## Spectinomycin Hydrochloride

### Product Information

Product Name	Cat#	Specification
Spectinomycin Hydrochloride	60215ES08	5 g

### Product Description

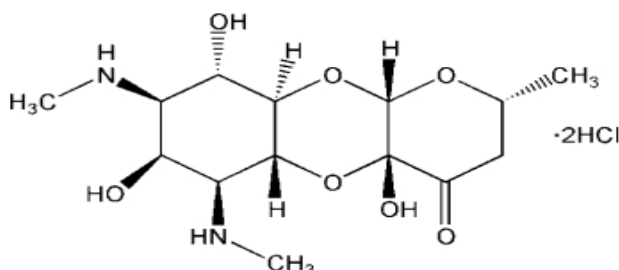
Spectinomycin hydrochloride, an amino cyclic alcohol antibiotic, has a strong inhibitory effect on both Gram-positive and Gram-negative bacteria. Its antibacterial principle is that it can bind to the 30S subunit of bacterial ribosome and inhibit protein synthesis and extension by interfering with the translocation of peptide tRNA. The mutation of *rpsE* in ribosomal protein 5S gene can prevent the binding of spectinomycin hydrochloride and produce resistance to the antibiotic.

In cell culture, spectinomycin hydrochloride can be used as an antibacterial agent and a screening drug for screening resistant *Escherichia coli* or plant cells. It can be prepared into a storage solution of 10 mg/mL after 0.22 μM filter membrane, filter and sterilize, sub pack, and freeze at -20°C.

### Product Properties

<b>Synonyms</b>	Togamycin dihydrochloride pentahydrate; Actinospectacin dihydrochloride pentahydrate; Espectinomicina dihydrochloride pentahydrate
<b>CAS#</b>	22189-32-8
<b>Molecular Weight</b>	405.3 g/mol
<b>Molecular Formular</b>	$C_{14}H_{24}N_2O_7 \cdot 2HCl$
<b>Appearance</b>	White crystal or powder
<b>Activity</b>	>737 μg/mg
<b>Melting Point</b>	205-207°C
<b>Purity</b>	> 98 %
<b>Solubility</b>	Dissolve in water (50 mg/mL), methanol, DMSO (~11 mg/mL), ethanol (~0.3 mg/mL), DMF (~2 mg/mL).

### Structure



### Shipping and Storage

The product component is shipped with ice pack and can be stored at 2-8°C for 2 years.

### Cautions

- 1) The solution cannot be autoclaved.
- 2) For your safety and health, please wear experimental clothes and disposable gloves.
- 3) This product is only used for scientific research.