



## Product Information

**Product ID** S6018

**CAS No.** 22189-32-8

**Chemical Name**

**Synonym** Spectam, Spectinomycin dihydrochloride, Stanilo

**Formula**  $C_{14}H_{24}N_2O_7 \cdot 2HCl \cdot 5H_2O$

**Formula Wt.** 495.25

**Melting Point** -205-207° C (dec)

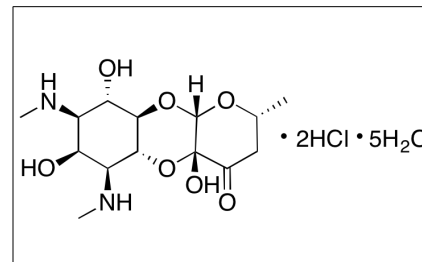
**Purity**  $\geq 603$   $\mu\text{g}/\text{mg}$  (potency)

**Solubility** Soluble in water to 100 mM.  
methanol, propylene glycol,  
and formamid. DMSO to 99  
mg/mL, PBS to 10 mg/mL.

**Store Temp** -20° C

**Ship Temp** Ambient

**Description** Spectinomycin is an aminocyclitol antibiotic initially produced by *Streptomyces*. Spectinomycin binds 16S rRNA of the 30S bacterial ribosome, inhibiting translocation and protein synthesis. Spectinomycin exhibits antibacterial activity and was originally used to treat gonorrhea, but has since been replaced by newer drugs.



**Bulk quantities available upon request**

Product ID	Size
S6018	5 g
S6018	25 g

**References** Ilina EN, Malakhova MV, Bodoev IN, et al. Mutation in ribosomal protein S5 leads to spectinomycin resistance in *Neisseria gonorrhoeae*. *Front Microbiol.* 2013 Jul 10;4:186. PMID: 23847609.

Kehrenberg C, Schwarz S. Mutations in 16S rRNA and ribosomal protein S5 associated with high-level spectinomycin resistance in *Pasteurella multocida*. *Antimicrob Agents Chemother.* 2007 Jun;51(6):2244-6. PMID: 17371823.

**Caution:** This product is intended for laboratory and research use only. It is not for human or drug use.