

# Streptomycin, HRP conjugate

DAG1293

Lot. No. (See product label)

### **PRODUCT INFORMATION**

Product overview	Streptomycin, HRP conjugate
Antigen Description	Streptomycin is an antibiotic produced by soil bacteria of the genus Streptomyces and is active against both gram positive and gram negative bacteria, including species resistant to other antibiotics, eg some streptococci, penicillin resistant staphylococci, and bacteria of the genera Proteus and Pseudomonas. Originally isolated by Selman A. Waksman and Albert Schatz in 1947, streptomycin is effective against tubercle bacilli and is a mainstay of tuberculosis therapy. Because streptomycin resistant tubercle bacilli emerge during treatment, the antibiotic is usually used in combination with one or more of the drugs isoniazid, ethambutol, and aminosalicylic acid. Streptomycin acts by inhibiting protein synthesis and damaging cell membranes in susceptible microorganisms. Possible side effects include injury to the kidneys and nerve damage that can result in dizziness and deafness.
Source	Aminoglycosides
Conjugate	HRP
Form	concentrate
Characteristic	Each conjugate comprises antigen covalently bound to horseradish peroxide and is suitable as a tracer in immunoassay development

#### PACKAGING

Storage Can be stored at 2-8°C for up to 3 months and at -20°C for longer term storage.

#### BACKGROUND

Introduction	Streptomycin is an antibiotic drug, the first of a class of drugs called aminoglycosides to be discovered, and was the first antibiotic remedy for tuberculosis. It is derived from the actinobacterium Streptomyces griseus. Streptomycin is a bactericidal antibiotic. Streptomycin cannot be given orally, but must be administered by regular intramuscular injections. An adverse effect of this medicine is ototoxicity, nephrotoxicity, fetal auditory toxicity and neuromuscular paralysis.
Keywords	Streptomycin; 2,4-Diguanidino-3,5,6-trihydroxycyclohexyl 5-deoxy-2-O-(2-deoxy-2-methylamino-a- glucopyranosyl)-3-formylpentofuranoside; Agrimycin; Neodiestreptopab; NSC 14083; Streptomycin (base and/or unspecified derivatives); O-2-deoxy-2-methylamino-a-L-glucopyranosyl-(1-2)-O-5-deoxy- 3-C-formyl-a-L-lyxofuranosyl-(1-4)-N1,N3-diamidino-D-streptamine

## REFERENCES

1. Singh B, Mitchison DA (16 January 1954). "Bactericidal Activity of Streptomycin and Isoniazid Against Tubercle Bacilli". British Medical Journal 1 (4854): 130–132. DOI:10.1136/bmj.1.4854.130. PMC 2084433. PMID 13106497. 2. Sharma D, Cukras AR, Rogers EJ, Southworth DR, Green R (7 December 2007). "Mutational analysis of S12 protein and implications for the accuracy of decoding by the ribosome". Journal of Molecular Biology. PMID 17967466.

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