

Neomycin, BSA-conjugate

DAG4470 chemosynthetic

Lot. No. (See product label)

PRODUCT INFORMATION

Product overview	Neomycin, BSA-conjugate
Description	The neomycin trisulfate salt hydrate and BSA (bovine serum albumin) (10 mg each) are conjugated by EDC method in 0.1 M MES pH 5.0. One or more of the six amine groups in the neomycin are directly linked to carboxyl group(s) in the BSA without any linker b
Species	chemosynthetic
Conjugate	BSA
Applications	The neomycin, BSA-conjugate has been shown to be recognized by neomycin-specific antibodies by ELISA and lateral flow based immunoassay, respectively.
Usage	Used as capture antigen for the detection of anti-neomycin antibodies and as immunogen for the generation of neomycin antibodies.
Notes	for research use only

PACKAGING

Storage	Keep below -20°C for up to 1 year. Avoid repeated freeze-and-thaw. For short term storage (< 3 weeks) keep at 4°C.
Concentration	2.0 mg/ml
Buffer	BSA(in 20 mM PBS, pH 7.4)

BACKGROUND

Introduction	Neomycin is an aminoglycoside antibiotic found in many topical medications such as creams, ointments, and eyedrops. The discovery of neomycin dates back to 1949. It was discovered in the lab of Selman Waksman, who was later awarded the Nobel Prize in Physiology and medicine in 1951. Neomycin belongs to aminoglycoside class of antibiotics that contain two or more aminosugars connected by glycosidic bonds. Neamine (two rings), ribostamycin (three rings), paromomycin (four rings), and lividomycin (five rings) are some other examples of aminoglycosides. They have shown tremendous potential as antibacterials. One of them, gentamicin, has been used extensively in clinical practice. Due to the inherent oto- and nephrotoxicity of these substances, systemic use has declined, as safer alternatives have become available.
Keywords	Neomycin; (2S,3S,4S,5R)-5-amino-2-(aminomethyl)-6-((2R,3S,4R,5S)-5-((1R,2R,5R,6R)-3,5-diamino-2-((2R,3S,4R,5S)-3-amino-6-(aminomethyl)-4,5-dihydroxytetrahydro-2H-pyran-2-yloxy)-6-hydroxycyclohexyloxy)-4-hydroxy-2-(hydroxymethyl)tetrahydrofuran-3-yloxy)tet

REFERENCES

1. "Your Medicine Cabinet". DERMAdoctor.com, Inc.. Retrieved 2008-10-19.
2. "The Nobel Prize in Physiology or Medicine 1952". Nobel Foundation. Retrieved 2008-10-29.