

Neomycin, KLH-conjugate

DAG4486 chemosynthetic

Lot. No. (See product label)

PRODUCT INFORMATION

Product overview	Neomycin, KLH-conjugate
Description	The neomycin trisulfate salt hydrate and KLH (keyhole limpet hemocyanin) (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 KLH without any lin
Species	chemosynthetic
Conjugate	KLH
Applications	The neomycin, KLH-conjugate has been successfully used as an immunogen in inducing neomycin specific antibodies in mice.
Usage	Used as immunogen for the generation of anti-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	Approximately 2.0 mg/ml
Buffer	KLH(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.