



Recombinant Protein Technical Manual
Recombinant *Klebsiella pneumoniae* NEO Protein
RPES3535

Product Data:

Product SKU: RPES3535

Size: 10µg

Species: *Klebsiella pneumoniae*

Expression host: *E. coli*

Uniprot: P00552

Protein Information:

Molecular Mass: 29 kDa

AP Molecular Mass: 28-30 kDa

Tag:

Bio-activity:

Purity: > 95% as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

Shipping: This product is provided as liquid. It is shipped at frozen temperature with blue ice. Upon receipt, store it immediately at < -20°C.

Formulation: Supplied as a 0.2 µm filtered solution of PBS, pH 7.4, 20% Glycerol.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Aminoglycoside 3'-phosphotransferase; APH(3')-II; APH(3')II; Kanamycin kinase type II; Neomycin-kanamycin phosphotransferase type II; neo

Immunogen Information:

Sequence: Met1-Phe264

Background:

Aminoglycoside 3'-phosphotransferase (APH(3')), also known as aminoglycoside kinase, is an aminoglycoside-modifying enzyme and widely presented in resistant bacteria. These ATP-dependent enzymes phosphorylate the 3'-hydroxyl of a variety of aminoglycosides including kanamycins, neomycins, paromomycins, neamine, ribostamycin, geneticin, and paromamine. These phosphorylated aminoglycosides fail to bind to their respective ribosomal binding sites with high affinity; hence resistance is conferred to the drugs that are phosphorylated. APH(3') is primarily found in certain species of gram-positive bacteria.