

Recombinant *Klebsiella pneumoniae* NEO Protein

Catalog No. PKSQ050062

Note: Centrifuge before opening to ensure complete recovery of vial contents.

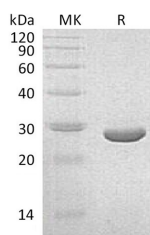
Description

Synonyms	Aminoglycoside 3'-phosphotransferase;APH(3')-II;APH(3')II;Kanamycin kinase type II;Neomycin-kanamycin phosphotransferase type II;neo
Species	<i>Klebsiella pneumoniae</i>
Expression Host	E.coli
Sequence	Met1-Phe264
Accession	P00552
Calculated Molecular Weight	29 kDa
Observed molecular weight	26-30 kDa
Tag	None
Bioactivity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein 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/gel packs. Upon receipt, store it immediately at < -20°C.
Formulation	Supplied as a 0.2 µm filtered solution of 20mM Tris-HCl, 6%Trehalose, 4%Mannitol, 0.05%Tween80, PH8.0.
Reconstitution	Not Applicable

Data



> 95 % as determined by reducing SDS-PAGE.

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

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affinity; hence resistance is conferred to the drugs that are phosphorylated. APH(3') is primarily found in certain species of gram-positive bacteria.