

Product datasheet for AP09735PU-L

Kanamycin Sheep Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: ELISA

Recommended Dilution: ELISA: 0.312 µg/ml.

Host: Sheep

Isotype: IgG

Clonality: Polyclonal

Immunogen: Kanamycin-BTG

Specificity: This antibody recognizes Kanamycin.

Formulation: 20mM Phosphate, 150mM Sodium Chloride

State: Ig Fraction

State: Liquid Ig fraction prepared by Caprylic Acid and Ammonium Sulphate precipitation

procedures

Preservative: 0.09% Sodium Azide

Concentration: lot specific

Conjugation: Unconjugated

Storage: Upon receipt, store undiluted (in aliquots) at -20°C.

Avoid repeated freezing and thawing.

Stability: Shelf life: One year from despatch.



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Kanamycin Sheep Polyclonal Antibody - AP09735PU-L

Background:

Kanamycin (also known as kanamycin A) is an aminoglycoside bacteriocidal antibiotic, available in oral, intravenous, and intramuscular forms, and used to treat a wide variety of infections. Kanamycin is isolated from the bacterium *Streptomyces kanamyceticus* and its most commonly used form is kanamycin sulfate.

Kanamycin is used in molecular biology as a selective agent most commonly to isolate bacteria (e.g., E. coli) which have taken up genes (e.g., of plasmids) coupled to a gene coding for kanamycin resistance (primarily Neomycin phosphotransferase II [NPT II/Neo]). Bacteria that have been transformed with a plasmid containing the kanamycin resistance gene are plated on kanamycin (50-100 ug/ml) containing agar plates or are grown in media containing kanamycin (50-100 ug/ml). Only the bacteria that have successfully taken up the kanamycin resistance gene become resistant and will grow under these conditions. As a powder kanamycin is white to off-white and is soluble in water (50 mg/ml).

Mammalian cells and other eukaryotes are screened using G418, a similar aminoglycoside antibiotic, which KanMX confers resistance against.

At least one such gene, Atwbc19 is native to a plant species, of comparatively large size and its coded protein acts in a manner which decreases the possibility of horizontal gene transfer from the plant to bacteria; it may be incapable of giving resistance to kanamycin to bacteria even if gene transfer occurs.

Synonyms:

Kanamycin A, Kantrex