

RPL24 Antibody / 60S ribosomal protein L24 (FY12905)

Catalog No.	Formulation	Size
FY12905	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

Availability	1-2 days
Species Reactivity	Human, Mouse, Rat
Format	Lyophilized
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	P83731
Applications	Western Blot: 0.25-0.5ug/ml Immunocytochemistry/Immunofluorescence: 5ug/ml ELISA: 0.1-0.5ug/ml
Limitations	This RPL24 antibody is available for research use only.

Description

RPL24 antibody detects 60S ribosomal protein L24, a structural component of the large ribosomal subunit essential for protein synthesis. Encoded by the RPL24 gene on chromosome 3p21.3, this ribosomal protein contributes to ribosome assembly, rRNA processing, and translation elongation. RPL24 participates in maintaining translational fidelity and efficiency, influencing cell growth, proliferation, and metabolic control.

Structurally, RPL24 is a 157-amino-acid protein of approximately 18 kilodaltons that forms part of the ribosomal 60S subunit. It is highly conserved across species and interacts with ribosomal RNA and neighboring proteins to stabilize the ribosomal architecture. RPL24 localizes predominantly to the cytoplasm and nucleolus, reflecting its dual role in ribosome biogenesis and cytoplasmic translation.

The RPL24 antibody is widely used in molecular biology, cancer research, and translational control studies to analyze ribosome composition, protein synthesis rates, and growth regulation. Western blot analysis identifies an 18 kilodalton band corresponding to RPL24, while immunofluorescence shows strong cytoplasmic and nucleolar localization. This antibody supports research examining how ribosomal proteins coordinate mRNA translation with cellular metabolism and proliferation.

Functionally, RPL24 promotes ribosome maturation by assisting in 28S rRNA folding and subunit joining. Reduced RPL24 expression impairs translation efficiency and causes growth defects, while overexpression supports rapid proliferation in tumor cells. Mutations in ribosomal proteins including RPL24 are associated with developmental syndromes and cancers characterized by deregulated protein synthesis. The RPL24 antibody provides a critical tool for studying ribosome biogenesis, translational regulation, and ribosomal stress responses. NSJ Bioreagents validates this antibody for western blotting, immunohistochemistry, and immunofluorescence, ensuring accurate detection for studies of translation and growth control.

Application Notes

Optimal dilution of the RPL24 antibody should be determined by the researcher.

Immunogen

E.coli-derived human RPL24 recombinant protein (Position: M1-R157) was used as the immunogen for the RPL24 antibody.

Storage

After reconstitution, the RPL24 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.