

RPS6 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20175a

Specification

RPS6 Antibody (N-term) - Product Information

Application WB,E
Primary Accession P62753

Other Accession <u>P62755</u>, <u>P62754</u>, <u>Q4R4K6</u>, <u>Q5E995</u>,

NP 001001.2, G1TM55

Reactivity Human

Predicted Bovine, Monkey, Mouse, Rabbit, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 28681
Antigen Region 1-30

RPS6 Antibody (N-term) - Additional Information

Gene ID 6194

Other Names

40S ribosomal protein S6, Phosphoprotein NP33, RPS6

Target/Specificity

This RPS6 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human RPS6.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

RPS6 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

RPS6 Antibody (N-term) - Protein Information

Name RPS6 {ECO:0000303|PubMed:29563586, ECO:0000312|HGNC:HGNC:10429}





Function Component of the 40S small ribosomal subunit (PubMed:<u>23636399</u>, PubMed:<u>8706699</u>). Plays an important role in controlling cell growth and proliferation through the selective translation of particular classes of mRNA (PubMed:<u>17220279</u>). Part of the small subunit (SSU) processome, first precursor of the small eukaryotic ribosomal subunit. During the assembly of the SSU processome in the nucleolus, many ribosome biogenesis factors, an RNA chaperone and ribosomal proteins associate with the nascent pre-rRNA and work in concert to generate RNA folding, modifications, rearrangements and cleavage as well as targeted degradation of pre-ribosomal RNA by the RNA exosome (PubMed:<u>34516797</u>).

Cellular Location

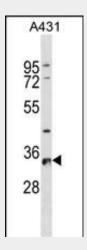
Cytoplasm. Nucleus, nucleolus

RPS6 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

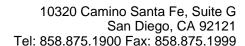
RPS6 Antibody (N-term) - Images



RPS6 Antibody (N-term) (Cat. #AP20175a) western blot analysis in A431 cell line lysates (35ug/lane). This demonstrates the RPS6 antibody detected the RPS6 protein (arrow).

RPS6 Antibody (N-term) - Background

Ribosomes, the organelles that catalyze protein synthesis, consist of a small 40S subunit and a large 60S subunit. Together these subunits are composed of 4 RNA species and approximately 80 structurally distinct proteins. This gene encodes a cytoplasmic ribosomal protein that is a component of the 40S subunit. The protein belongs to the S6E family of ribosomal proteins. It is the major substrate of protein kinases in the ribosome, with subsets of five C-terminal serine residues phosphorylated by different protein





kinases. Phosphorylation is induced by a wide range of stimuli, including growth factors, tumor-promoting agents, and mitogens. Dephosphorylation occurs at growth arrest. The protein may contribute to the control of cell growth and proliferation through the selective translation of particular classes of mRNA. As is typical for genes encoding ribosomal proteins, there are multiple processed pseudogenes of this gene dispersed through the genome.

RPS6 Antibody (N-term) - References

Maggi, L.B. Jr., et al. Mol. Cell. Biol. 28(23):7050-7065(2008)
Fujita, K., et al. Acta Neuropathol. 116(4):439-445(2008)
Robledo, S., et al. RNA 14(9):1918-1929(2008)
Glover, E.I., et al. Am. J. Physiol. Regul. Integr. Comp. Physiol. 295 (2), R604-R610 (2008): Ma, X.M., et al. Cell 133(2):303-313(2008)