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# RPS6 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20175a

## Product Information

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|---|---|
| **Application** | WB, E |
| **Primary Accession** | P62753 |
| **Other Accession** | P62755, P62754, Q4R4K6, Q5E995, NP_001001.2 |
| **Reactivity** | Human |
| **Predicted** | Bovine, Monkey, Mouse, Rat |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB41661 |
| **Calculated MW** | 28681 |
| **Antigen Region** | 1-30 |

## Additional Information

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| **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. |

## Protein Information

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|---|---|
| **Name** | RPS6 {ECO:0000303\|PubMed:29563586, ECO:0000312\|HGNC:HGNC:10429} |
| **Function** | Component of the 40S small ribosomal subunit (PubMed: 23636399, PubMed:8706699). Plays an important role in controlling cell growth and proliferation through the selective translation of particular classes of mRNA |

(PubMed:17220279). 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:34516797).

**Cellular Location** Cytoplasm. Nucleus, nucleolus

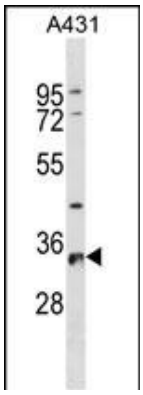
## Background

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.

## 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)

## 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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.