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RPS6 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1977a

Product Information

Application	WB, E
Primary Accession	P62753
Other Accession	P62755, P62754, Q4R4K6, Q5E995
Reactivity	Human
Predicted	Bovine, Monkey, Mouse, Rat, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB12889
Calculated MW	28681
Antigen Region	1-30

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.

Protein Information

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

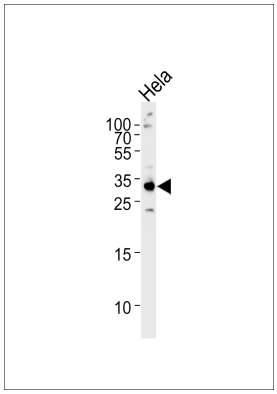
Background

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. RPS6 is 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.

References

Lott J.B., Gene 65:31-39(1988).
Heinze H., J. Biol. Chem. 263:4139-4144(1988).
Antoine M., Hum. Mol. Genet. 1:565-570(1992).
Pata I., Gene 121:387-392(1992).

Images



Western blot analysis of lysate from HeLa cell line, using RPS6 Antibody (N-term)(Cat. #AP1977a). AP1977a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug per lane.

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