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RPS6 (Ser240/244) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10275a

Product Information

Application	IHC-P, FC, WB, E
Primary Accession	P62753
Other Accession	P39017, P62755, P62754, Q4R4K6, P47838, Q5E995, NP_001001.2
Reactivity	Human
Predicted	Bovine, Chicken, Monkey, Rat, Xenopus, Mouse, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB27687
Calculated MW	28681
Antigen Region	220-249

Additional Information

Gene ID	6194
Other Names	40S ribosomal protein S6, Phosphoprotein NP33, RPS6
Target/Specificity	This RPS6 (Ser240/244) Antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 220-249 amino acids from human RPS6.
Dilution	IHC-P~~1:100~500 FC~~1:10~50 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 (Ser240/244) Antibody 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

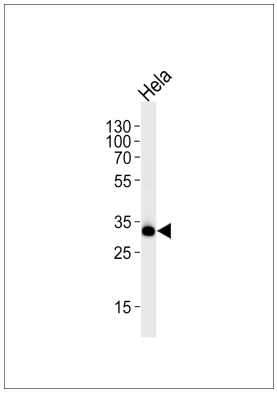
Background

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. 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

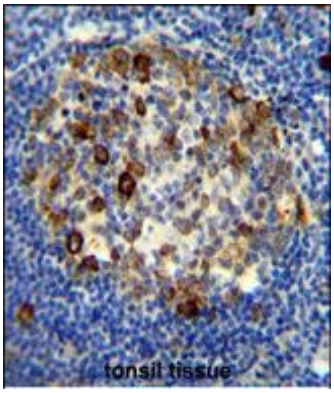
Maggi, L.B. Jr., et al. Mol. Cell. Biol. 28(23):7050-7065(2008)
Fujita, K., et al. Acta Neuropathol. 116(4):439-445(2008)
Robledo, S., et al. RNA 14(9):1918-1929(2008)
Glover, E.I., et al. Am. J. Physiol. Regul. Integr. Comp. Physiol. 295 (2), R604-R610 (2008) :
Ma, X.M., et al. Cell 133(2):303-313(2008)

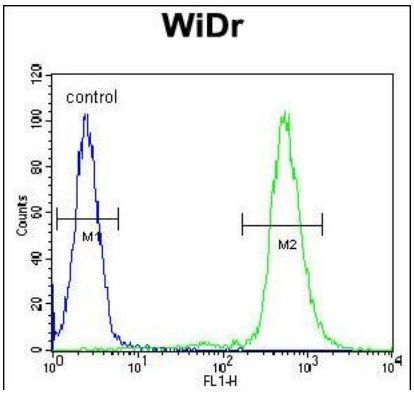
Images



Western blot analysis of lysate from HeLa cell line, using RPS6 Antibody(Ser240/244)(Cat. #AP10275a). AP10275a 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.

RPS6 antibody (Ser240/244) (Cat. #AP10275a) immunohistochemistry analysis in formalin fixed and paraffin embedded human tonsil tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the RPS6 antibody (Ser240/244) for immunohistochemistry. Clinical relevance has not been evaluated.





RPS6 Antibody (Ser240/244) (Cat. #AP10275a) flow cytometric analysis of WiDr cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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