

### RPS6 (Ser240/244) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP10275a

#### Specification

## **RPS6 (Ser240/244) Antibody - Product Information**

Application Primary Accession Other Accession

Reactivity Predicted

Host Clonality Isotype Calculated MW Antigen Region WB, IHC-P, FC,E P62753 P39017, P62755, P62754, Q4R4K6, P47838, Q5E995, NP\_001001.2, G1TM55 Human Bovine, Chicken, Monkey, Mouse, Rabbit, Rat, Xenopus Rabbit Polyclonal Rabbit IgG 28681 220-249

### **RPS6 (Ser240/244) Antibody - 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** WB~~1:1000 IHC-P~~1:50~100 FC~~1:10~50

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.

# **RPS6 (Ser240/244) Antibody - 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 (Ser240/244) Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

RPS6 (Ser240/244) Antibody - 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.

# RPS6 (Ser240/244) Antibody - 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 (Ser240/244) Antibody - 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)