

# Phospho-Ser244 Ribosomal Protein S6 Antibody

Affinity purified rabbit polyclonal antibody Catalog # AN1252

## **Specification**

# Phospho-Ser244 Ribosomal Protein S6 Antibody - Product Information

WB **Application Primary Accession** P62754

Reactivity Human, Mouse

Predicted Chicken, Pig, Monkey, Rat, Xenopus,

Zebrafish **Rabbit** 

Host Clonality polyclonal Calculated MW **28 KDa** 

## Phospho-Ser244 Ribosomal Protein S6 Antibody - Additional Information

Gene ID 20104 Gene Name RPS6

**Other Names** 

40S ribosomal protein S6, Phosphoprotein NP33, Rps6

## Target/Specificity

Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser244 conjugated to KLH.

### **Dilution**

WB~~ 1:1000

### **Format**

Prepared from rabbit serum by affinity purification via sequential chromatography on phosphoand dephosphopeptide affinity columns.

## **Antibody Specificity**

Specific for the ~28k rpS6 protein phosphorylated at Ser244

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

Phospho-Ser244 Ribosomal Protein S6 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## **Shipping**

Blue Ice

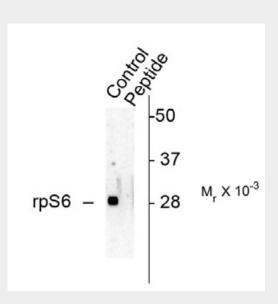
## Phospho-Ser244 Ribosomal Protein S6 Antibody - Protocols



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

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

## Phospho-Ser244 Ribosomal Protein S6 Antibody - Images



Western blot of Jurkat cell lysate showing specific immunolabeling of the ~28k rpS6phosphorylated at Ser244 (Control). Phosphospecificity is shown in the second lanewhere immunolabeling is blocked by preadsorption of the phospho-peptide used asantigen (peptide) but not by the corresponding dephosphopeptide (not shown).

## Phospho-Ser244 Ribosomal Protein S6 Antibody - Background

Ribosomal protein S6 (rpS6) is a crit ical component of the 40 S ribosomal subunit that mediates translation initiation at the 5

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GpppG cap of mRNA. The rpS6 protein is both cytoplasmic and nuclear localized (Chen and Dittmer 2011). In response to mitogenic stimuli, rpS6

undergoes ordered C-terminal phosphorylation by p70 S6 kinases and p90 ribosomal S6 kinases on four

Ser residues (Ser-235, Ser-236, Ser-240, and Ser-244) whose modification potentiates rpS6 cap binding

activity (Hutchinson et al., 2011). Additionally, rpS6 phosphorylation and function are highly regulated and have been implicated in the regulation of translational initiation and protein synthesis in response to

extracellular stimuli such as TRAIL and gamma interferon (IFN-



), as well as upon activation of the phosphatidylinositol 3-kinase (PI3K)-A kt-mTOR pathway (Chen and Dittmer 2011).

# Phospho-Ser244 Ribosomal Protein S6 Antibody - References

Chen W and Dittmer D (2011) Ribosomal protein S6 (RPS6) interacts with the latency-associated nuclear

antigen (LANA) of Kaposi sarcoma associated herpesvirus (KSHV). J. Virol. 18 9495-9505 Fumagalli S. and Thomas, G. (2000). S6 phosphorylation and signal transduction. In Translational control of gene expression (eds. N. Sonenberg et al.), pp. 695-717. Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY. Hutchinson JA, Shanware NP, Chang H, Tibbetts RS . (2011

) Regulation of ribosomal protein S6 phosphorylation by casein kinase 1 and prot ein phosphatase 1. J Biol Chem 10:8688-96