

Anti-RPS6 Antibody

CATALOG NO.: A1995-100 (100 µl)

BACKGROUND DESCRIPTION: 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.

ALTERNATE NAMES: 40S ribosomal protein S6; Phosphoprotein NP33

ANTIBODY TYPE: Polyclonal

HOST/ISOTYPE: Rabbit / IgG

IMMUNOGEN: KLH-conjugated synthetic peptide targeting a sequence within the C-term region of human RPS6

MOLECULAR WEIGHT: 32 kDa

PURIFICATION: Affinity purified

FORM: Liquid

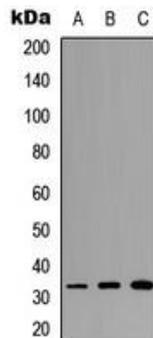
FORMULATION: In 0.42% Potassium phosphate; 0.87% NaCl; pH 7.3; 30% glycerol; and 0.01% sodium azide

SPECIES REACTIVITY: Human, Mouse, Rat, Monkey, Rabbit, Chicken, Dog, Bovine

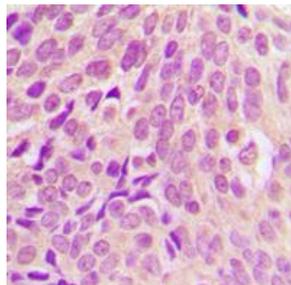
STORAGE CONDITIONS: Store at -20°C. Avoid freeze / thaw cycles

APPLICATIONS AND USAGE: WB 1:500 - 1:1000, IHC 1:100 - 1:200, IF 1:100 - 1:500

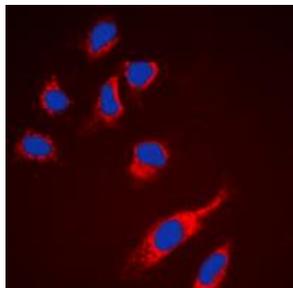
Note: This information is only intended as a guide. The optimal dilutions must be determined by the user



Western blot analysis of RPS6 expression in Jurkat (A); LOVO (B); RAW264.7 (C) whole cell lysates.



Immunohistochemical analysis of RPS6 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0), then incubated with the antibody at RT and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with hematoxylin and mounted with DPX.



Immunofluorescent analysis of RPS6 staining in DU145 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at RT. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at RT in the dark. DAPI was used to stain the cell nuclei (blue).

RELATED PRODUCTS:

Phospho RPS6 (Ser240) Antibody (A1961)
Phospho S6K1 (Thr421) Antibody (A1967)
Anti-mTOR Rabbit Monoclonal Antibody (A1595)
Phospho RPS6 (Ser235) Antibody (A1960)

FOR RESEARCH USE ONLY! Not to be used on humans.