

DESCRIPTION

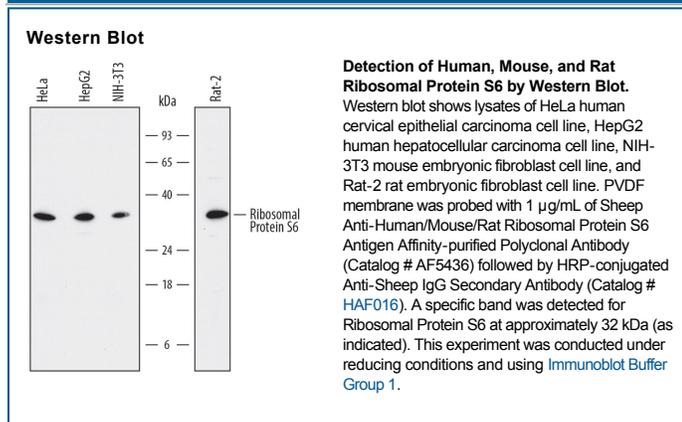
Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse and rat Ribosomal Protein S6 in Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Ribosomal Protein S6 Met1-Lys249 Accession # P62753
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

(40S) Ribosomal protein S6 (rpS6; also Phosphoprotein NP33) is a 32-34 kDa member of the ribosomal protein S6e family of molecules. It is ubiquitously expressed and involved in the regulation of cell size. Higher eukaryotic ribosomes contain a small (or 40S) and large (or 60S) subunit. The small subunits are composed of one RNA molecule plus more than 30 individual proteins, one of which is rp6S. It is a substrate of both PASKIN and S6 kinase, and when phosphorylated C-terminally, appears to slow the rate of protein synthesis. Notably, the activities of rpS6 are complex, as phosphorylation seems to decrease cell proliferation and glucose utilization on one hand, while increasing cell size on the other. Human ribosomal protein S6 is 249 amino acids (aa) in length. It possesses two acetylated lysines plus six phosphorylated serines. There are three potential splice forms. One contains a four aa substitution for aa 1-46, a second utilizes an alternative start site at Met32, and a third utilizes the same Met32 start site coupled to a substitution of a Gln residue for aa 234-243. Full-length human, mouse and rat rpS6 are identical in their amino acid sequences.