

## Human/Mouse/Rat Ribosomal Protein S6/RPS6 Alexa Fluor® 405-conjugated Antibody

Antigen Affinity-purified Polyclonal Sheep IgG Catalog Number: AF5436V 100 µg

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	E. coli-derived recombinant human Ribosomal Protein S6 Met1-Lys249 Accession # P62753
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
	*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet

## **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.

Western Blot Optimal dilution of this antibody should be experimentally determined.

(SDS) for additional information and handling instructions.

PREPARATION AND STORAGE	
Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

## **BACKGROUND**

(40S) Ribosomal protein S6 (rpS6; also Phosphoprotein NP33) is a 32-34 kDa member of the ribsosmal 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 as 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.

## PRODUCT SPECIFIC NOTICES

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