

#### RPS2 Antibody (C-Term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22218b

#### Specification

# **RPS2 Antibody (C-Term) - Product Information**

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW WB, FC, IF,E <u>P15880</u> <u>O18789</u>, <u>P25444</u>, <u>P27952</u> Human, Mouse Bovine, Rat Rabbit polyclonal Rabbit IgG 31324

## **RPS2** Antibody (C-Term) - Additional Information

Gene ID 6187

Other Names 40S ribosomal protein S2, 40S ribosomal protein S4, Protein LLRep3, RPS2, RPS4

Target/Specificity

This RPS2 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 248-379 amino acids from human RPS2.

Dilution WB~~1:2000 FC~~1:25 IF~~1:25 E~~Use at an assay dependent concentration.

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

RPS2 Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

#### **RPS2** Antibody (C-Term) - Protein Information

Name RPS2



# Synonyms RPS4

**Function** Component of the ribosome, a large ribonucleoprotein complex responsible for the synthesis of proteins in the cell (PubMed:<u>23636399</u>). The small ribosomal subunit (SSU) binds messenger RNAs (mRNAs) and translates the encoded message by selecting cognate aminoacyl-transfer RNA (tRNA) molecules (PubMed:<u>23636399</u>). The large subunit (LSU) contains the ribosomal catalytic site termed the peptidyl transferase center (PTC), which catalyzes the formation of peptide bonds, thereby polymerizing the amino acids delivered by tRNAs into a polypeptide chain (PubMed:<u>23636399</u>). The nascent polypeptides leave the ribosome through a tunnel in the LSU and interact with protein factors that function in enzymatic processing, targeting, and the membrane insertion of nascent chains at the exit of the ribosomal tunnel (PubMed:<u>23636399</u>). Plays a role in the assembly and function of the 40S ribosomal subunit (By similarity). Mutations in this protein affects the control of translational fidelity (By similarity).

#### **Cellular Location**

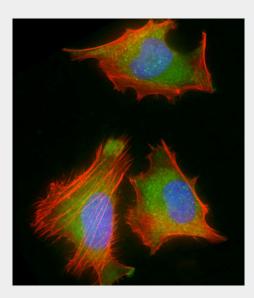
Cytoplasm. Nucleus, nucleolus. Note=Probably localized to nucleolus and cytoplasm in complex with ZNF277.

## **RPS2 Antibody (C-Term) - Protocols**

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

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

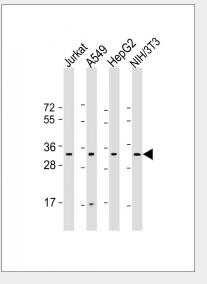
#### **RPS2 Antibody (C-Term) - Images**



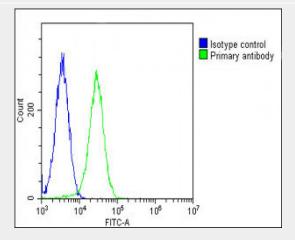
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (human cervical epithelial adenocarcinoma cell line) cells labeling RPS2 with AP22218b at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-rabbit IgG (1583138) secondary



antibody at 1/200 dilution (green). Immunofluorescence image showing cytoplasm and nucleus staining on HeLa cell line. Cytoplasmic actin is detected with Dylight® 554 Phalloidin (OI17558410) at 1/100 dilution (red). The nuclear counter stain is DAPI (blue).



All lanes : Anti-RPS2 Antibody (C-Term) at 1:2000 dilution Lane 1: Jurkat whole cell lysate Lane 2: A549 whole cell lysate Lane 3: HepG2 whole cell lysate Lane 4: NIH/3T3 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 31 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Overlay histogram showing Hela cells stained with AP22218b(green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP22218b, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit lgG, **DyLight**® 488 Conjugated Highly Cross-Adsorbed(OH191631) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG1 ( $1\mu$ g/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

## **RPS2** Antibody (C-Term) - References

Slynn G.,et al.Nucleic Acids Res. 18:681-681(1990). Ota T.,et al.Nat. Genet. 36:40-45(2004). Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases. Vladimirov S.N.,et al.Eur. J. Biochem. 239:144-149(1996). Swiercz R.,et al.Biochem. J. 386:85-91(2005).