

# RPL23A Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1939b

### **Product Information**

**Application** IHC-P, WB, E **Primary Accession** P62750

Other AccessionP62752, P62751, Q24JY1ReactivityHuman, Rat, MousePredictedBovine, Mouse, Rat

HostRabbitClonalityPolyclonalIsotypeRabbit IgGClone NamesRB9668Calculated MW17695Antigen Region111-140

## **Additional Information**

Gene ID 6147

Other Names 60S ribosomal protein L23a, RPL23A

Target/Specificity This RPL23A antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 111-140 amino acids from the

C-terminal region of human RPL23A.

**Dilution** IHC-P~~1:100 WB~~1:1000 E~~Use at an assay dependent concentration.

Format Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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** RPL23A Antibody (C-term) is for research use only and not for use in

diagnostic or therapeutic procedures.

### **Protein Information**

Name RPL23A

**Function** Component of the large ribosomal subunit (PubMed: <u>23636399</u>,

PubMed:32669547). The ribosome is a large ribonucleoprotein complex responsible for the synthesis of proteins in the cell (PubMed:23636399,

PubMed:32669547). Binds a specific region on the 26S rRNA (PubMed:23636399, PubMed:32669547). May promote p53/TP53 degradation possibly through the stimulation of MDM2-mediated TP53 polyubiquitination (PubMed:26203195).

#### **Cellular Location**

Cytoplasm. Nucleus Note=Although RPL23A is functional within the cytoplasm, the assembly of ribosomal subunits occurs in the nucleus. RPL23A nuclear import is mediated by IPO5/RanBP5, IPO7/RanBP7, KPNB1/importin-beta or TPNO1/Trn

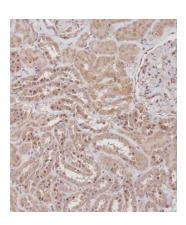
# **Background**

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. RPL23A is a ribosomal protein that is a component of the 60S subunit. The protein belongs to the L23P family of ribosomal proteins. It is located in the cytoplasm. The protein may be one of the target molecules involved in mediating growth inhibition by interferon. In yeast, the corresponding protein binds to a specific site on the 26S rRNA. This gene is co-transcribed with the U42A, U42B, U101A, and U101B small nucleolar RNA genes, which are located in its third, first, second, and fourth introns, respectively.

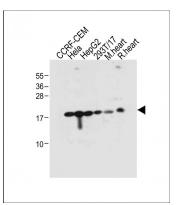
### References

Uechi, T., et al., Genomics 72(3):223-230 (2001). Fan, W., et al., Genomics 46(2):234-239 (1997). Jiang, H., et al., Oncogene 14(4):473-480 (1997). Fan, W., et al., Immunogenetics 44(2):97-103 (1996). Wool, I.G., et al., Biochem. Cell Biol. 73 (11-12), 933-947 (1995).

# **Images**



Immunohistochemical analysis of AP1939B on paraffin-embedded Human kidney tissue. Tissue was fixed with formaldehyde at room temperature. Heat induced epitope retrieval was performed by EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:100) for 1 hour at room temperature. Undiluted CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



All lanes: Anti-RPL23A Antibody (C-term) at 1:2000 dilution Lane 1: CCRF-CEM whole cell lysate Lane 2: Hela whole cell lysate Lane 3: HepG2 whole cell lysate Lane 4: 293T/17 whole cell lysate Lane 5: Mouse heart tissue lysate Lane 6: Rat heart tissue lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 18 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

# **Citations**

- <u>Tissue-specific expression of ribosomal protein paralogue eRpL22-like in Drosophila melanogaster eye development</u>
- Functional interplay between ribosomal protein paralogues in the eRpL22 family in Drosophila melanogaster.
- Loss of Drosophila nucleostemin 2 (NS2) blocks nucleolar release of the 60S subunit leading to ribosome stress.
- Nucleolar stress in Drosophila melanogaster: RNAi-mediated depletion of Nopp140.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.