

# RPS14 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP16046b

#### **Product Information**

Application WB, E Primary Accession P62263

Other Accession P13471, P62264, P14130, P62265, NP 001020241.1, NP 005608.1

Reactivity Human

**Predicted** Hamster, Drosophila, Mouse, Rat

HostRabbitClonalityPolyclonalIsotypeRabbit IgGClone NamesRB35277Calculated MW16273Antigen Region118-147

## **Additional Information**

Gene ID 6208

Other Names 40S ribosomal protein S14, RPS14

**Target/Specificity** This RPS14 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 118-147 amino acids from the

C-terminal region of human RPS14.

**Dilution** WB~~1:1000 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** RPS14 Antibody (C-term) is for research use only and not for use in diagnostic

or therapeutic procedures.

#### **Protein Information**

Name RPS14 ( <u>HGNC:10387</u>)

**Function** Component of the small ribosomal subunit. The ribosome is a large

ribonucleoprotein complex responsible for the synthesis of proteins in the cell. Part of the small subunit (SSU) processome, first precursor of the small

eukaryotic ribosomal subunit. During the assembly of the SSU processome in the nucleolus, many ribosome biogenesis factors, an RNA chaperone and ribosomal proteins associate with the nascent pre-rRNA and work in concert to generate RNA folding, modifications, rearrangements and cleavage as well as targeted degradation of pre-ribosomal RNA by the RNA exosome (PubMed:34516797).

**Cellular Location** 

Cytoplasm. Nucleus, nucleolus

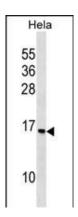
# **Background**

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. This gene encodes a ribosomal protein that is a component of the 40S subunit. The protein belongs to the S11P family of ribosomal proteins. It is located in the cytoplasm. Transcript variants utilizing alternative transcription initiation sites have been described in the literature. As is typical for genes encoding ribosomal proteins, there are multiple processed pseudogenes of this gene dispersed through the genome. In Chinese hamster ovary cells, mutations in this gene can lead to resistance to emetine, a protein synthesis inhibitor. Multiple alternatively spliced transcript variants encoding the same protein have been found for this gene.

## References

Oliva, E.N., et al. Eur. J. Haematol. 85(3):231-235(2010) Borze, I., et al. Cancer Genet. Cytogenet. 197(2):166-173(2010) Quarello, P., et al. Haematologica 95(2):206-213(2010) Valencia, A., et al. Blood 112 (3), 918 (2008) : Ebert, B.L., et al. Nature 451(7176):335-339(2008)

# **Images**



RPS14 Antibody (C-term) (Cat. #AP16046b) western blot analysis in Hela cell line lysates (35ug/lane). This demonstrates the RPS14 antibody detected the RPS14 protein (arrow).

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