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RPS24 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9726C

Product Information

Application	FC, WB, E
Primary Accession	P62847
Other Accession	P62850, P62849, Q4R5H5, Q56JU9
Reactivity	Human
Predicted	Bovine, Monkey, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB24304
Calculated MW	15423
Antigen Region	65-93

Additional Information

Gene ID	6229
Other Names	40S ribosomal protein S24, RPS24
Target/Specificity	This RPS24 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 65-93 amino acids from the Central region of human RPS24.
Dilution	FC~~1:10~50 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	RPS24 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	RPS24 (HGNC:10411)
Function	Component of the small ribosomal subunit (PubMed: 23636399). The ribosome is a large ribonucleoprotein complex responsible for the synthesis of proteins in the cell (PubMed:23636399). Required for processing of

pre-rRNA and maturation of 40S ribosomal subunits (PubMed:18230666). 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

Tissue Location Mature tissues, such as adult brain, skeletal muscle, heart, and kidney, express low levels, whereas tissues and organs with significant populations of proliferating cells, such as fetal brain, placenta, bone marrow, and various glandular organs, contain significantly higher levels.

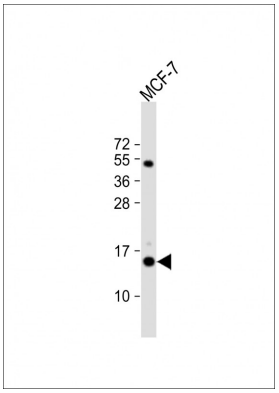
Background

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. RPS24 is a ribosomal protein that is a component of the 40S subunit. The protein belongs to the S24E family of ribosomal proteins. It is located in the cytoplasm. Multiple transcript variants encoding different isoforms have been found for this gene. As is typical for genes encoding ribosomal proteins, there are multiple processed pseudogenes of this gene dispersed through the genome.

References

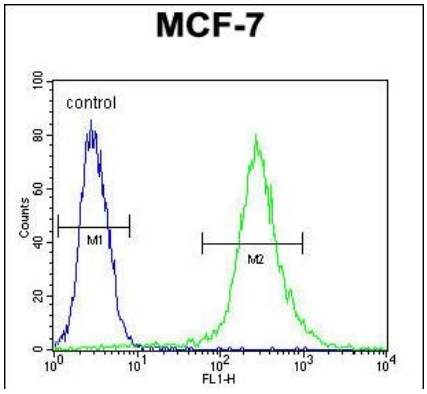
Quarello, P., et al. Haematologica 95(2):206-213(2010)
Badhai, J., et al. Biochim. Biophys. Acta 1792(10):1036-1042(2009)
Robledo, S., et al. RNA 14(9):1918-1929(2008)

Images



Anti-RPS24 Antibody (Center) at 1:1000 dilution + MCF-7 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 : 15 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

RPS24 Antibody (Center) (Cat. #AP9726c) flow cytometric analysis of MCF-7 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



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