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Anti-RPS23 Antibody

Catalog # AP60508

Product Information

Application	WB, IHC
Primary Accession	P62266
Reactivity	Human, Mouse, Rat, Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	15808

Additional Information

Gene ID	6228
Other Names	40S ribosomal protein S23
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human RPS23. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

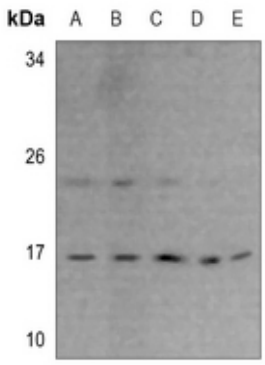
Name	RPS23
Function	Component of the ribosome, a large ribonucleoprotein complex responsible for the synthesis of proteins in the cell (PubMed:23636399, PubMed:25901680, PubMed:25957688, PubMed:28257692). The small ribosomal subunit (SSU) binds messenger RNAs (mRNAs) and translates the encoded message by selecting cognate aminoacyl-transfer RNA (tRNA) molecules (PubMed:23636399, PubMed:25901680, PubMed:25957688). 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:23636399, PubMed:25901680, PubMed:25957688). 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:23636399, PubMed:25901680, PubMed:25957688). Plays an important role in translational accuracy (PubMed:28257692). 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).

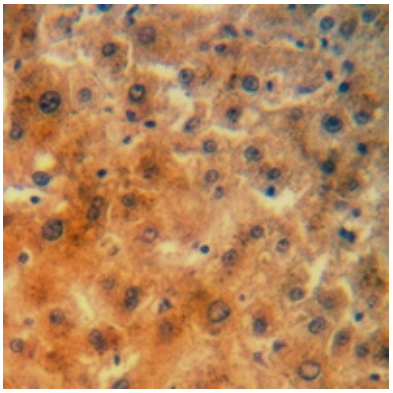
Cellular Location

Cytoplasm, cytosol. Cytoplasm Rough endoplasmic reticulum {ECO:0000250|UniProtKB:Q6SA96}. Nucleus, nucleolus. Note=Detected on cytosolic polysomes (PubMed:25957688). Detected in ribosomes that are associated with the rough endoplasmic reticulum (By similarity) {ECO:0000250|UniProtKB:Q6SA96, ECO:0000269|PubMed:25957688}

Images



Western blot analysis of RPS23 expression in Hela (A), DLD (B), mouse spleen (C), rat testis (D), rat spleen (E) whole cell lysates. (Predicted band size: 15 kD; Observed band size: 16 kD)



Immunohistochemical analysis of RPS23 staining in human liver cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.