

Rpl5 antibody - C-terminal region

Rabbit Polyclonal Antibody

Catalog # AI13904

Product Information

Application	WB
Primary Accession	P47962
Other Accession	NM_016980 , NP_058676
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Dog, Guinea Pig, Horse, Bovine
Predicted	Human, Mouse, Zebrafish, Pig, Chicken, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	34401

Additional Information

Gene ID	100503670
Alias Symbol	MGC101934, MGC117998, U21RNA
Other Names	60S ribosomal protein L5, Rpl5
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-Rpl5 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	Rpl5 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Rpl5
Function	Component of the ribosome, a large ribonucleoprotein complex responsible for the synthesis of proteins in the cell (PubMed: 36517592). The small ribosomal subunit (SSU) binds messenger RNAs (mRNAs) and translates the encoded message by selecting cognate aminoacyl-transfer RNA (tRNA) molecules (By similarity). 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 (By similarity). 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 (By similarity).

As part of the 5S RNP/5S ribonucleoprotein particle it is an essential component of the LSU, required for its formation and the maturation of rRNAs (By similarity). It also couples ribosome biogenesis to p53/TP53 activation (By similarity). As part of the 5S RNP it accumulates in the nucleoplasm and inhibits MDM2, when ribosome biogenesis is perturbed, mediating the stabilization and the activation of TP53 (By similarity).

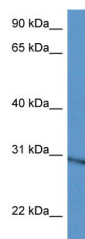
Cellular Location

Cytoplasm. Nucleus, nucleolus {ECO:0000250|UniProtKB:P46777}.
Note=Although RP5 is functional within the cytoplasm, the assembly of ribosomal subunits occurs in the nucleus. RPL5 nuclear import is mediated by IPO5/RanBP5, IPO7/RanBP7, KPNB1/importin-beta or TPNO1/Trn {ECO:0000250|UniProtKB:P46777}

References

Carninci P.,et al.Science 309:1559-1563(2005).
Qu L.H.,et al.Nucleic Acids Res. 22:4073-4081(1994).
Zach O.R.F.,et al.Submitted (DEC-1994) to the EMBL/GenBank/DDBJ databases.
Park J.,et al.Mol. Cell 50:919-930(2013).

Images



WB Suggested Anti-Rpl5 Antibody Titration: 1.0 µg/ml
Positive Control: Mouse Heart

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