

RPL11 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51711

Product Information

Application WB, ICC **Primary Accession** P62913

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW20252

Additional Information

Gene ID 6135

Other Names 60S ribosomal protein L11, CLL-associated antigen KW-12, RPL11

Dilution WB~~1:1000 ICC~~N/A

Format 0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name RPL11

Function Component of the ribosome, a large ribonucleoprotein complex responsible

for the synthesis of proteins in the cell (PubMed: 19191325,

PubMed: <u>32669547</u>). The small ribosomal subunit (SSU) binds messenger RNAs (mRNAs) and translates the encoded message by selecting cognate

aminoacyl-transfer RNA (tRNA) molecules (PubMed: 19191325,

PubMed:32669547). 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:19191325, PubMed:32669547). 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:19191325, PubMed:32669547). 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 (PubMed:12962325,

PubMed: 19061985, PubMed: 24120868). It also couples ribosome biogenesis to p53/TP53 activation. 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 (PubMed: 24120868).

Cellular Location

Nucleus, nucleolus. Cytoplasm {ECO:0000250|UniProtKB:Q9CXW4}

Background

Binds to 5S ribosomal RNA (By similarity). Required for rRNA maturation and formation of the 60S ribosomal subunits. Promotes nucleolar location of PML (By similarity).

References

Mishin V.P., et al. Bioorg. Khim. 21:158-160(1995).
Bhat K.S., et al. Submitted (MAY-1998) to the EMBL/GenBank/DDBJ databases.
Voronina E.N., et al. Mol. Biol. (Mosk.) 37:425-435(2003).
Quadroni M., et al. Submitted (NOV-2005) to UniProtKB.
Krackhardt A.M., et al. Submitted (OCT-2001) to the EMBL/GenBank/DDBJ databases.

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