

GIG34 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58296

Product Information

Application WB, IHC-P, IHC-F, IF, E

Primary Accession
Reactivity
Rat, Pig, Dog
Host
Clonality
Polyclonal
Calculated MW
20252
Physical State
Liquid

Immunogen KLH conjugated synthetic peptide derived from human RPL11/GIG34

Epitope Specificity 101-178/178

Isotype IgG

Purity affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Nucleus, nucleolus (By similarity).

SIMILARITY Belongs to the ribosomal protein L5P family. **SUBUNIT** Interacts with PML and MDM2 (By similarity).

DISEASE Diamond-Blackfan anemia 7 (DBA7) [MIM:612562]: A form of

Diamond-Blackfan anemia, a congenital non-regenerative hypoplastic anemia

that usually presents early in infancy. Diamond-Blackfan anemia is

characterized by a moderate to severe macrocytic anemia,

erythroblastopenia, and an increased risk of malignancy. 30 to 40% of Diamond-Blackfan anemia patients present with short stature and congenital anomalies, the most frequent being craniofacial (Pierre-Robin syndrome and cleft palate), thumb and urogenital anomalies. Note=The disease is caused by

mutations affecting the gene represented in this entry.

Important Note This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

Background Descriptions 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 60S subunit. The protein belongs to the L5P family of ribosomal proteins. It is located in

the cytoplasm. The protein probably associates with the 5S rRNA.

Alternatively spliced 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. [provided by RefSeq, Dec 2010].

Additional Information

Gene ID 6135

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

subunit protein uL5, RPL11

Dilution WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000

-10000

Format 0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

Storage Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

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,

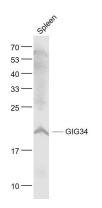
PubMed: 19061985, PubMed: 24120868). It also couples ribosome biogenesis

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).

Promotes nucleolar location of PML (By similarity).

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

Images



Sample:

Spleen (Mouse) Lysate at 40 ug

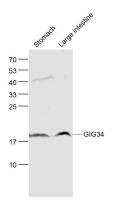
Primary: Anti- GIG34 (AP58296) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at

1/20000 dilution

Predicted band size: 20 kD Observed band size: 20 kD

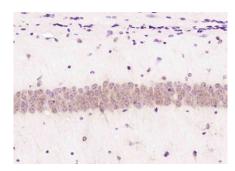
Sample:

Stomach (Mouse) Lysate at 40 ug



Large intestine (Mouse) Lysate at 40 ug Primary: Anti-GIG34 (AP58296) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 20 kD Observed band size: 20 kD



Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (GIG34) Polyclonal Antibody, Unconjugated (AP58296) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

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