

RPL7 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP16047A

Specification

RPL7 Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB,E <u>P18124</u> <u>Q4R506</u>, <u>NP_000962.2</u> Human Monkey Rabbit Polyclonal Rabbit IgG 29226 6-35

RPL7 Antibody (N-term) - Additional Information

Gene ID 6129

Other Names 60S ribosomal protein L7, RPL7

Target/Specificity

This RPL7 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 6-35 amino acids from the N-terminal region of human RPL7.

Dilution 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 RPL7 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

RPL7 Antibody (N-term) - Protein Information

Name RPL7



Function Component of the large ribosomal subunit (PubMed:<u>12962325</u>, PubMed:<u>23636399</u>, PubMed:<u>32669547</u>). The ribosome is a large ribonucleoprotein complex responsible for the synthesis of proteins in the cell (PubMed:<u>12962325</u>, PubMed:<u>23636399</u>, PubMed:<u>32669547</u>). Binds to G-rich structures in 28S rRNA and in mRNAs (PubMed:<u>12962325</u>). Plays a regulatory role in the translation apparatus; inhibits cell-free translation of mRNAs (PubMed:<u>12962325</u>).

Cellular Location Cytoplasm.

RPL7 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

RPL7 Antibody (N-term) - Images



RPL7 Antibody (N-term) (Cat. #AP16047a) western blot analysis in Hela cell line lysates (35ug/lane). This demonstrates the RPL7 antibody detected the RPL7 protein (arrow).

RPL7 Antibody (N-term) - 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. This gene encodes a ribosomal protein that is a component of the 60S subunit. The protein belongs to the L30P family of ribosomal proteins. It contains an N-terminal basic region-leucine zipper (BZIP)-like domain and the RNP consensus submotif RNP2. In vitro the BZIP-like domain mediates homodimerization and stable binding to DNA and RNA, with a preference for 28S rRNA and mRNA. The protein can inhibit cell-free translation of mRNAs, suggesting that it plays a regulatory role in



the translation apparatus. It is located in the cytoplasm. The protein has been shown to be an autoantigen in patients with systemic autoimmune diseases, such as systemic lupus erythematosus. As is typical for genes encoding ribosomal proteins, there are multiple processed pseudogenes of this gene dispersed through the genome.

RPL7 Antibody (N-term) - References

Chou, C.W., et al. FEBS Lett. 584(19):4151-4156(2010) Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) : Maggi, L.B. Jr., et al. Mol. Cell. Biol. 28(23):7050-7065(2008) Robledo, S., et al. RNA 14(9):1918-1929(2008) Wu, W.C., et al. FEBS Lett. 581(4):651-657(2007)