

MRPL41 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP13125A

Specification

MRPL41 Antibody (N-term) - Product Information

Application WB.E **Primary Accession O8IXM3** Other Accession NP 115866.1 Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 15383 Antigen Region 8-36

MRPL41 Antibody (N-term) - Additional Information

Gene ID 64975

Other Names

39S ribosomal protein L41, mitochondrial, L41mt, MRP-L41, 39S ribosomal protein L27 homolog, Bcl-2-interacting mitochondrial ribosomal protein L41, Cell proliferation-inducing gene 3 protein, MRP-L27 homolog, MRPL41, BMRP, MRPL27, RPML27

Target/Specificity

This MRPL41 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 8-36 amino acids from the N-terminal region of human MRPL41.

Dilution

WB~~1:1000

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

MRPL41 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

MRPL41 Antibody (N-term) - Protein Information

Name MRPL41



Synonyms BMRP, MRPL27, RPML27

Function Component of the mitochondrial ribosome large subunit (PubMed: 28892042, PubMed: 25838379, PubMed: 25278503). Also involved in apoptosis and cell cycle (PubMed: 16024796, PubMed: 16256947). Enhances p53/TP53 stability, thereby contributing to p53/TP53-induced apoptosis in response to growth-inhibitory condition. Enhances p53/TP53 translocation to the mitochondria. Has the ability to arrest the cell cycle at the G1 phase, possibly by stabilizing the CDKN1A and CDKN1B (p27Kip1) proteins (PubMed: 16024796).

Cellular LocationMitochondrion

Tissue Location

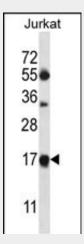
Present in kidney, liver, thymus and testis, and at lower level in brain and spleen (at protein level)

MRPL41 Antibody (N-term) - Protocols

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

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

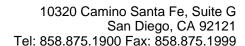
MRPL41 Antibody (N-term) - Images



MRPL41 Antibody (N-term) (Cat. #AP13125a) western blot analysis in Jurkat cell line lysates (35ug/lane). This demonstrates the MRPL41 antibody detected the MRPL41 protein (arrow).

MRPL41 Antibody (N-term) - Background

Mammalian mitochondrial ribosomal proteins are encoded by nuclear genes and help in protein synthesis within the mitochondrion. Mitochondrial ribosomes (mitoribosomes) consist of a small 28S subunit and a large 39S subunit. They have an estimated 75% protein to rRNA composition compared to prokaryotic ribosomes,





where this ratio is reversed. Another difference between mammalian mitoribosomes and prokaryotic ribosomes is that the latter contain a 5S rRNA. Among different species, the proteins comprising the mitoribosome differ greatly in sequence, and sometimes in biochemical properties, which prevents easy recognition by sequence homology. This gene encodes a 39S subunit protein that belongs to the YmL27 ribosomal protein family.

MRPL41 Antibody (N-term) - References

Kim, M.J., et al. Biochem. Biophys. Res. Commun. 338(2):1179-1184(2005) Yoo, Y.A., et al. Mol. Cell. Biol. 25(15):6603-6616(2005) Chintharlapalli, S.R., et al. J. Cell. Biochem. 94(3):611-626(2005) Humphray, S.J., et al. Nature 429(6990):369-374(2004) Zhang, Z., et al. Genomics 81(5):468-480(2003)