

MRPL41 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13125A**Specification**

MRPL41 Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	Q8IXM3
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:[25278503](#), PubMed:[25838379](#), PubMed:[28892042](#), PubMed:[35177605](#)). 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 Location

Mitochondrion

Tissue Location

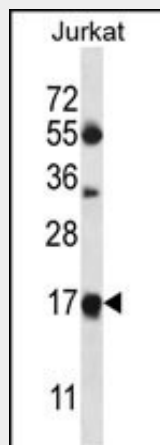
Present in kidney, liver, thymus and testis, and at lower level in brain and spleen (at protein level)

MRPL41 Antibody (N-term) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [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)