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MRPL42 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO2303a

Product Information

Application	WB, IHC, FC, ICC, E
Primary Accession	Q9Y6G3
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	3H6G11
Isotype	IgG1
Calculated MW	16661
Description	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 protein identified as belonging to both the 28S and the 39S subunits. Alternative splicing results in multiple transcript variants. Pseudogenes corresponding to this gene are found on chromosomes 4q, 6p, 6q, 7p, and 15q.
Immunogen	Purified recombinant fragment of human MRPL42 (AA: 142-203) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

Additional Information

Gene ID	28977
Other Names	39S ribosomal protein L42, mitochondrial, L42mt, MRP-L42, 28S ribosomal protein S32, mitochondrial, MRP-S32, S32mt, 39S ribosomal protein L31, mitochondrial, L31mt, MRP-L31, MRPL42, MRPL31, MRPS32, RPML31
Dilution	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 FC~~1/200 - 1/400 ICC~~N/A E~~1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	MRPL42 Antibody is for research use only and not for use in diagnostic or

therapeutic procedures.

Protein Information

Name	MRPL42
Synonyms	MRPL31, MRPS32, RPML31
Cellular Location	Mitochondrion

References

1.J Biol Chem. 2001 Nov 23;276(47):43958-69. 2.Genomics. 2003 May;81(5):468-80.

Images

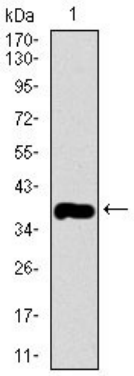


Figure 1: Western blot analysis using MRPL42 mAb against human MRPL42 recombinant protein. (Expected MW is 37.9 kDa)

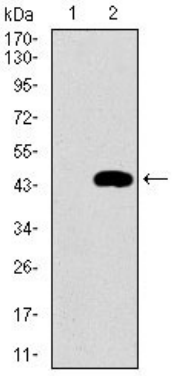


Figure 2: Western blot analysis using MRPL42 mAb against HEK293 (1) and MRPL42 (AA: 142-203)-hIgGFc transfected HEK293 (2) cell lysate.

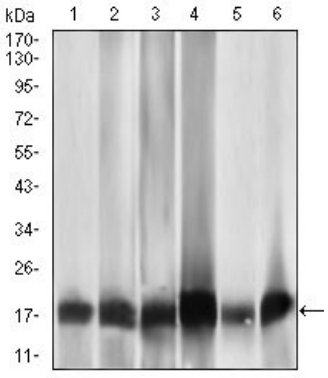
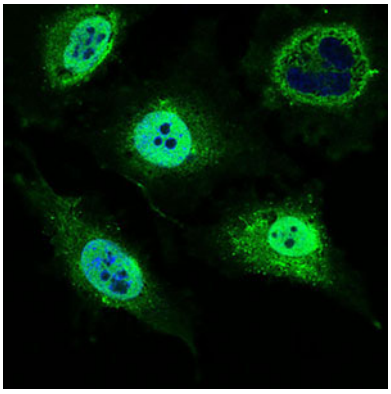


Figure 3: Western blot analysis using MRPL42 mouse mAb against HL7702 (1), HepG2 (2), SMMC-7721 (3), HEK293 (4), HeLa (5), and Raji (6) cell lysate.

Figure 4: Immunofluorescence analysis of HeLa cells using MRPL42 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye.



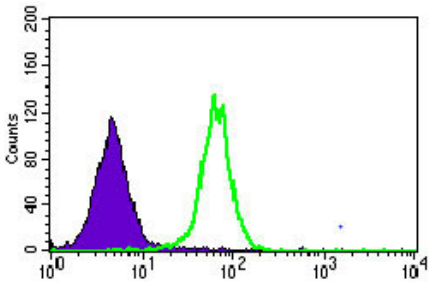


Figure 5: Flow cytometric analysis of HepG2 cells using MRPL42 mouse mAb (green) and negative control (purple).

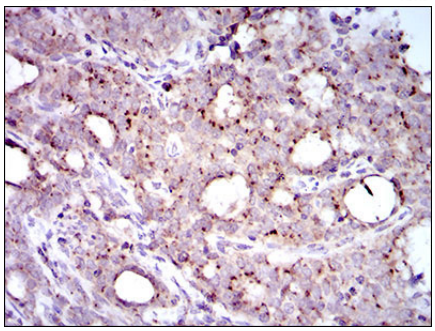


Figure 6: Immunohistochemical analysis of paraffin-embedded cervical cancer tissues using MRPL42 mouse mAb with DAB staining.