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**Product Name: MRPL42 Mouse Monoclonal Antibody****Catalog #: AMM83066**

For research use only.

**Summary**

<b>Description</b>	Mouse monoclonal Antibody
<b>Host</b>	Mouse
<b>Application</b>	WB,IHC,ICC,ELISA,FC
<b>Reactivity</b>	Human
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	Mouse IgG1
<b>Clonality</b>	Monoclonal
<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	PBS containing 0.03% sodium azide.
<b>Purification</b>	Affinity Purification

**Application**

<b>Dilution Ratio</b>	WB 1:500-1:2000,IHC 1:200-1:1000,ICC 1:200-1:400,ELISA 1:5000-1:20000,FC 1:200-1:400
<b>Molecular Weight</b>	16.7kDa

**Antigen Information**

<b>Gene Name</b>	MRPL42
<b>Alternative Names</b>	L31MT; L42MT; S32MT; MRPL31; MRPS32; PTD007; RPML31; HSPC204; MRP-L31; MRP-L42; MRP-S32
<b>Gene ID</b>	28977.0
<b>SwissProt ID</b>	Q9Y6G3
<b>Immunogen</b>	Purified recombinant fragment of human MRPL42 (AA: 142-203) expressed in E. Coli.

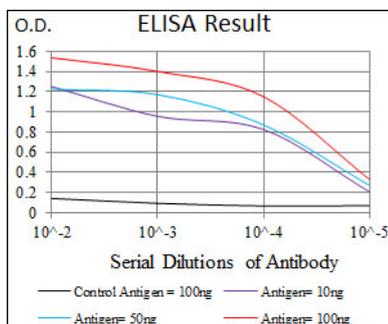
**Background**

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

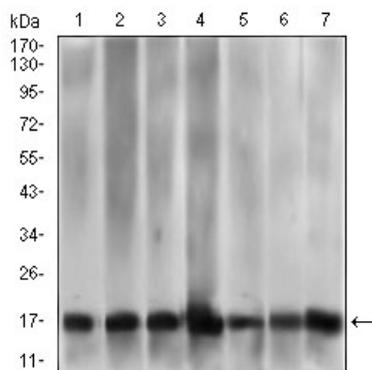
estimated 75% protein to rRNA composition compared to prokaryotic ribosomes, where this ratio is reversed. Another difference between mammalian mitoribosomes and prokaryotic ribosomes is that the latter contain a 5S rRNA. Among different species, the proteins comprising the mitoribosome differ greatly in sequence, and sometimes in biochemical properties, which prevents easy recognition by sequence homology. This gene encodes a 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.

## Research Area

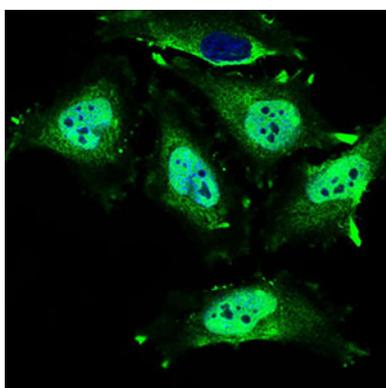
## Image Data



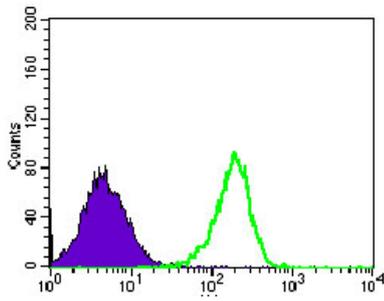
Red: Control Antigen (100ng), Purple: Antigen (10ng), Green: Antigen (50ng) Blue: Antigen (100ng),



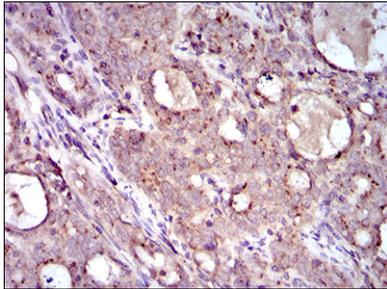
Western blot analysis using WRPL42 mouse mAb against HL7703(1), HepG2 (2), SMC-7721 (3) HEK293 (4), HL60(5), HeLa (6), and Rai (7) cell lysate.



Immunofluorescence analysis of HeLa cells using WRPL42 mouse mAb (green). Blue: DRA05 fluorescent DNA dye



Flow cytometric analysis of HEK293 cells using MRPL42 mouse mAb (green) and negative control (purple).



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