

Product Name: MRPL42 Mouse Monoclonal Antibody**Catalog #: AMM83079**

For research use only.

Summary

Description	Mouse monoclonal Antibody
Host	Mouse
Application	WB,IHC,ELISA,FC
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Monoclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Purified antibody in PBS with 0.05% sodium azide
Purification	Affinity Purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:200-1:1000,ELISA 1:5000-1:20000,FC 1:200-1:400
Molecular Weight	16.6kDa

Antigen Information

Gene Name	MRPL42
Alternative Names	L31MT; L42MT; S32MT; MRPL31; MRPS32; PTD007; RPML31; HSPC204; MRP-L31; MRP-L42; MRP-S32
Gene ID	28977.0
SwissProt ID	Q9Y6G3
Immunogen	Purified recombinant fragment of human MRPL42 (AA: 10-142) expressed in E. Coli.

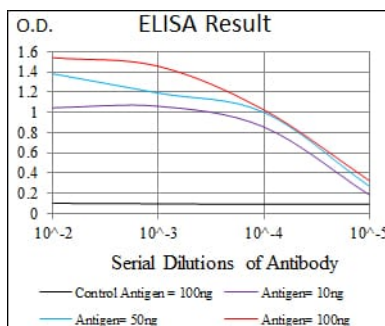
Background

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

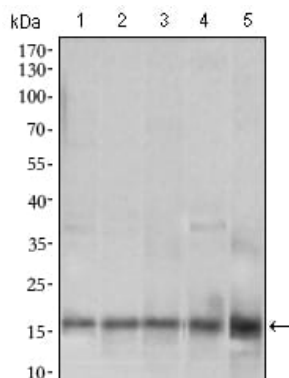
estimated 75% protein to rRNA composition compared to prokaryotic ribosomes, where this ratio is reversed. Another difference between mammalian mitoribosomes and prokaryotic ribosomes is that the latter contain a 5S rRNA. Among different species, the proteins comprising the mitoribosome differ greatly 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

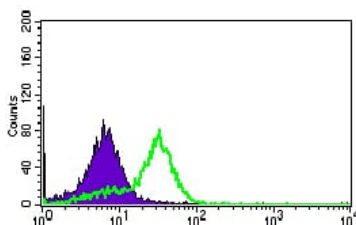
Image Data



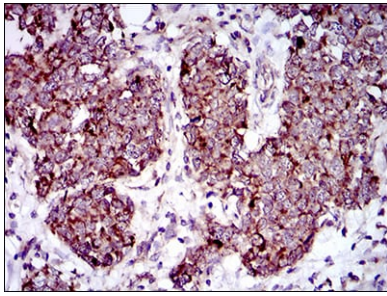
Black line: Control Antigen (100 ng); Purple line: Antigen(10ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng);



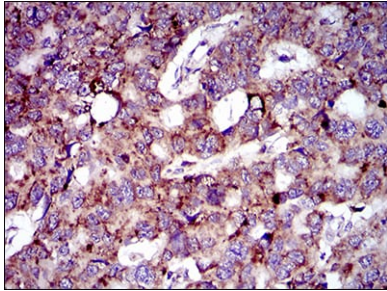
Western blot analysis using MRPL42 mouse mAb against HL7702 (1), SMMC-7721 (2), HEK293 (3), HeLa (4) and Raji (5) cell lysate.



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



Immunohistochemical analysis of paraffin-embedded human breast cancer tissues using MRPL42 mouse mAb with DAB staining.



Immunohistochemical analysis of paraffin-embedded human esophageal cancer tissues using MRPL42 mouse mAb with DAB staining.