

**Product Name: MRP-S22 Rabbit Polyclonal Antibody****Catalog #: APRab14147**

For research use only.

**Summary**

<b>Description</b>	Rabbit polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,IHC,ICC/IF,ELISA
<b>Reactivity</b>	Human,Monkey,Bovine,Hamster,Cow
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<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>	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

**Application**

<b>Dilution Ratio</b>	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:200-1:1000,ELISA 1:20000-1:40000
<b>Molecular Weight</b>	41kDa

**Antigen Information**

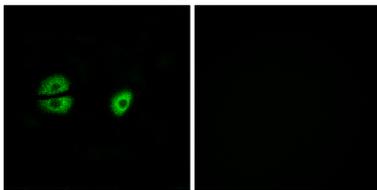
<b>Gene Name</b>	MRPS22
<b>Alternative Names</b>	MRPS22; C3orf5; RPMS22; GK002; 28S ribosomal protein S22; mitochondrial; MRP-S22; S22mt
<b>Gene ID</b>	56945.0
<b>SwissProt ID</b>	P82650
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human MRPS22. AA range:231-280

**Background**

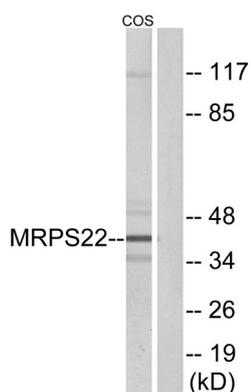
Mammalian mitochondrial ribosomal proteins are encoded by nuclear genes and help in protein synthesis within the mitochondrion. Mitochondrial ribosomes (mitoribosomes) consist of a small 28S subunit and a large 39S subunit. They have an estimated 75% protein to rRNA composition compared to prokaryotic 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 28S subunit protein that does not seem to have a counterpart in prokaryotic and fungal-mitochondrial ribosomes. This gene lies telomeric of and is transcribed in the opposite direction from the forkhead box L2 gene. A pseudogenedisease: Defects in MRPS22 are the cause of combined oxidative phosphorylation deficiency type 5 (COXPD5) [MIM:611719]. COXPD5 is an antenatal mitochondrial disease. Patients show edema, cardiomyopathy, tubulopathy, and hypotonia. subunit: Component of the mitochondrial ribosome small subunit (28S) which comprises a 12S rRNA and about 30 distinct proteins.

## Research Area

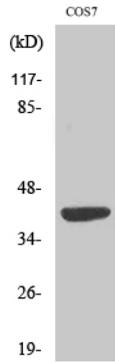
## Image Data



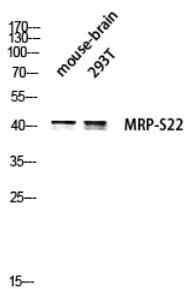
Immunofluorescence analysis of A549 cells, using MRPS22 Antibody. The picture on the right is blocked with the synthesized peptide.



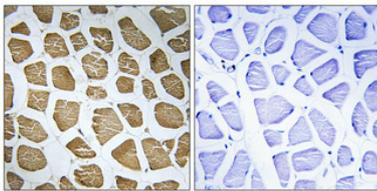
Western blot analysis of lysates from COS cells, using MRPS22 Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using MRP-S22 Polyclonal Antibody



Western blot analysis of mouse-brain 293T lysis using MRP-S22 antibody.



Immunohistochemical analysis of paraffin-embedded Human skeletal muscle. Antibody was diluted at 1:100 (4°, overnight). High-pressure and temperature Tris-EDTA, pH 8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.