

Summary

Production Name	MRP-S22 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IF,WB,IHC,ELISA
Reactivity	Human, Monkey, Bovine, Hamster, Cow

Performance

Conjugation	Unconjugated
Modification	Unmodified
lsotype	lgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4° C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw
	cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

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

Application

Dilution Ratio	WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:40000. Not yet tested in
	other applications.
Molecular Weight	41kD

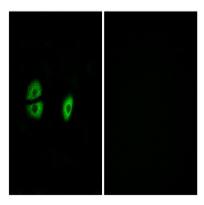


Background

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.,

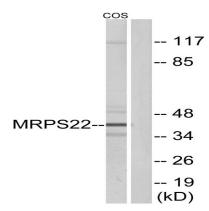
Research Area

Image Data

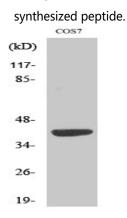


Immunofluorescence analysis of A549 cells, using MRPS22 Antibody. The picture on the right is blocked with the synthesized peptide.

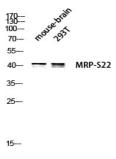




Western blot analysis of lysates from COS cells, using MRPS22 Antibody. The lane on the right is blocked with the

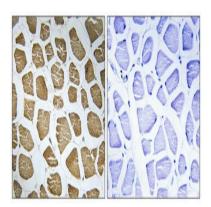


Western Blot analysis of various cells using MRP-S22 Polyclonal Antibody



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,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.

Note For research use only.