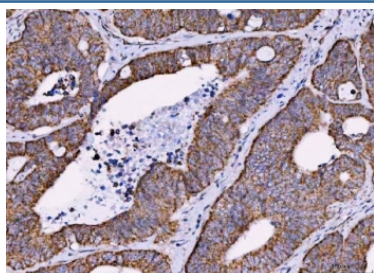


MRPS18B Antibody / 28S ribosomal protein S18b, mitochondrial (RQ7232)

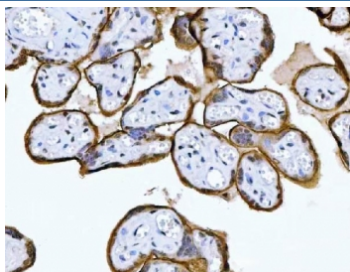
Catalog No.	Formulation	Size
RQ7232	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

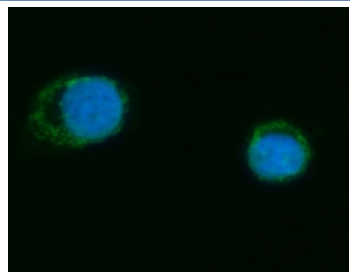
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q9Y676
Localization	Cytoplasmic (mitochondria)
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Immunofluorescence : 5ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml
Limitations	This MRPS18B antibody is available for research use only.



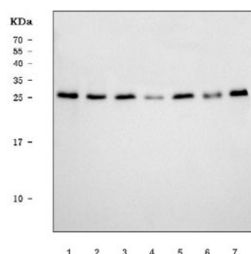
IHC staining of FFPE human colorectal adenocarcinoma tissue with MRPS18B antibody.
HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



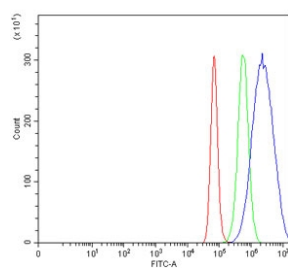
IHC staining of FFPE human placental tissue with MRPS18B antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Immunofluorescent staining of FFPE human T-47D cells with MRPS18B antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of human 1) A549, 2) 293T, 3) MCF7, 4) PC-3, 5) SH-SY5Y, 6) T-47D, 7) K562 cell lysate with MRPS18B antibody. Predicted molecular weight ~29 kDa.



Flow cytometry testing of human HeLa cells with MRPS18B antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= MRPS18B antibody.

Description

28S ribosomal protein S18b, mitochondrial is a protein that in humans is encoded by the MRPS18B gene. 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 belongs to the ribosomal protein S18P family. The encoded protein is one of three that has significant sequence similarity to bacterial S18 proteins. The primary sequences of the three human mitochondrial S18 proteins are no more closely related to each other than they are to the prokaryotic S18 proteins. Pseudogenes corresponding to this gene are found on chromosomes 1q and 2q.

Application Notes

Optimal dilution of the MRPS18B antibody should be determined by the researcher.

Immunogen

Recombinant human protein (amino acids H23-R211) was used as the immunogen for the MRPS18B antibody.

Storage

After reconstitution, the MRPS18B antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.