

Product datasheet for **TA378681**

MRPS31 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, ICC/IF, WB
Recommended Dilution:	WB, 1:500 - 1:2000 IF/ICC, 1:50 - 1:200 ELISA, Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.
Reactivity:	Human, Rat
Modifications:	Unmodified
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Formulation:	Buffer: PBS with 0.01% thimerosal, 50% glycerol, pH 7.3.
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C. Avoid freeze / thaw cycles.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	45kDa
Gene Name:	mitochondrial ribosomal protein S31
Database Link:	Entrez Gene 10240 Human Q92665



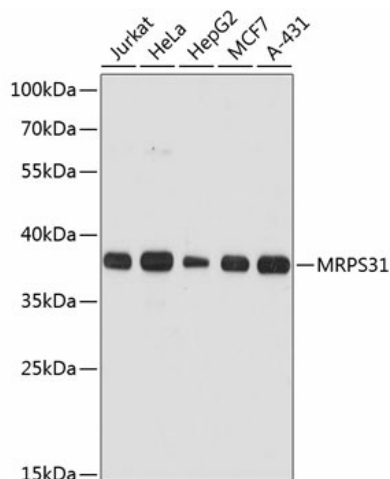
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Background:

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. The 28S subunit of the mammalian mitoribosome may play a crucial and characteristic role in translation initiation. This gene encodes a 28S subunit protein that has also been associated with type 1 diabetes; however, its relationship to the etiology of this disease remains to be clarified. Pseudogenes corresponding to this gene have been found on chromosomes 3 and 13.

Synonyms:

IMOGN38; MRP-S31; S31mt

Product images:


Western blot analysis of various lysates using MRPS31 Rabbit pAb (TA378681) at 1:3000 dilution.

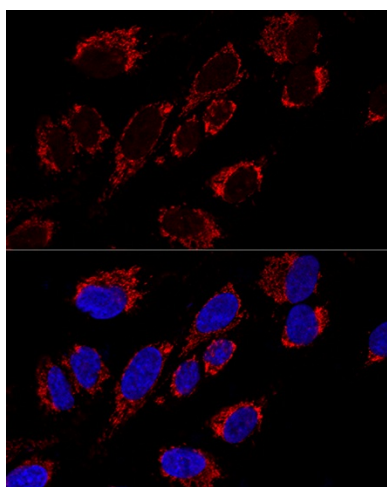
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 30s.



Confocal immunofluorescence analysis of U2OS cells using MRPS31 Rabbit pAb (TA378681) at dilution of 1:200. Blue: DAPI for nuclear staining.