MRPL28 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19152a

Product Information

Application	IF, WB, E
Primary Accession	Q13084
Other Accession	NP_006419.2
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	30157
Antigen Region	28-55

Additional Information

Gene ID	10573
Other Names	39S ribosomal protein L28, mitochondrial, L28mt, MRP-L28, Melanoma antigen p15, Melanoma-associated antigen recognized by T-lymphocytes, MRPL28, MAAT1
Target/Specificity	This MRPL28 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 28-55 amino acids from the N-terminal region of human MRPL28.
Dilution	IF~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	MRPL28 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MRPL28
Synonyms	MAAT1
Cellular Location	Mitochondrion

| Tissue Location	Found in a variety of normal tissues including spleen, testes, thymus, liver, kidney, brain, adrenal, lung and retinal tissue

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 39S subunit protein, a part of which was originally isolated by its ability to recognize tyrosinase in an HLA-A24-restricted fashion.

References

Lamesch, P., et al. Genomics 89(3):307-315(2007)
Martin, J., et al. Nature 432(7020):988-994(2004)
Zhang, Z., et al. Genomics 81(5):468-480(2003)
Koc, E.C., et al. J. Biol. Chem. 276(47):43958-43969(2001)
Kenmochi, N., et al. Genomics 77 (1-2), 65-70 (2001) :

Images
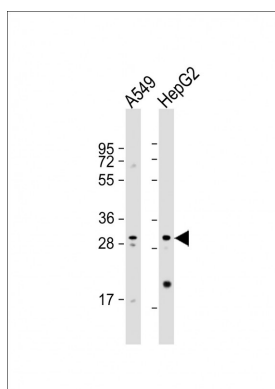
All lanes : Anti-MRPL28 Antibody (N-term) at 1:1000 dilution Lane 1: A549 whole cell lysate Lane 2: HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 30 kDa Blocking/Dilution buffer: 5% NFDM/TBST.
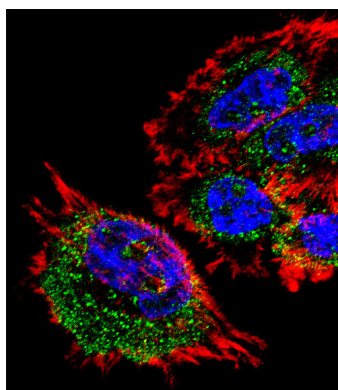
Fluorescent confocal image of A431 cell stained with MRPL28 Antibody (N-term)(Cat#AP19152a).A431 cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with MRPL28 primary antibody (1:25, 1 h at 37℃). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37℃).Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37℃). Nuclei were counterstained with DAPI (blue) (10 µg/ml, 10 min). MRPL28 immunoreactivity is localized to Mitochondria significantly.