

**MRPS12 Antibody (Center K43)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP12638c****Specification**

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**MRPS12 Antibody (Center K43) - Product Information**

Application	IHC-P, WB,E
Primary Accession	<a href="#">O15235</a>
Other Accession	<a href="#">NP_203526.1</a> , <a href="#">NP_066930.1</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	15173
Antigen Region	28-59

**MRPS12 Antibody (Center K43) - Additional Information****Gene ID** 6183**Other Names**

28S ribosomal protein S12, mitochondrial, MRP-S12, S12mt, MT-RPS12, MRPS12, RPMS12, RPSM12

**Target/Specificity**

This MRPS12 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 28-59 amino acids from the Central region of human MRPS12.

**Dilution**

IHC-P~~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**

MRPS12 Antibody (Center K43) is for research use only and not for use in diagnostic or therapeutic procedures.

**MRPS12 Antibody (Center K43) - Protein Information****Name** MRPS12

**Synonyms** RPMS12, RPSM12

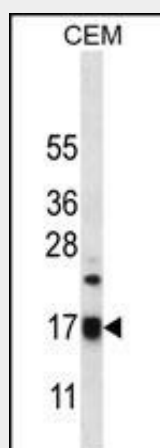
**Cellular Location**  
Mitochondrion.

### **MRPS12 Antibody (Center K43) - Protocols**

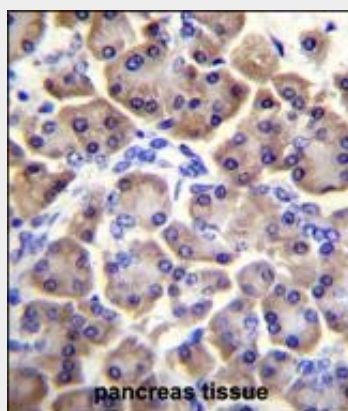
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **MRPS12 Antibody (Center K43) - Images**



MRPS12 Antibody (Center K43) (Cat. #AP12638c) western blot analysis in CEM cell line lysates (35ug/lane). This demonstrates the MRPS12 antibody detected the MRPS12 protein (arrow).



MRPS12 Antibody (Center K43) (Cat. #AP12638c) immunohistochemistry analysis in formalin fixed and paraffin embedded human pancreas tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of MRPS12 Antibody (Center

K43) for immunohistochemistry. Clinical relevance has not been evaluated.

### **MRPS12 Antibody (Center K43) - 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 belongs to the ribosomal protein S12P family. The encoded protein is a key component of the ribosomal small subunit and controls the decoding fidelity and susceptibility to aminoglycoside antibiotics. The gene for mitochondrial seryl-tRNA synthetase is located upstream and adjacent to this gene, and both genes are possible candidates for the autosomal dominant deafness gene (DFNA4). Splice variants that differ in the 5' UTR have been found for this gene; all three variants encode the same protein.

### **MRPS12 Antibody (Center K43) - References**

Zanotto, E., et al. Biochim. Biophys. Acta 1789(5):432-442(2009)  
Russo, A., et al. Biochim. Biophys. Acta 1779(12):820-829(2008)  
Stelzl, U., et al. Cell 122(6):957-968(2005)  
Cui, Y.P., et al. World J. Gastroenterol. 9(9):1892-1896(2003)  
Zhang, Z., et al. Genomics 81(5):468-480(2003)