

## MRPL12 Recombinant antibody

Catalog Number: 85070-5-RR

## Basic Information

Catalog Number: 85070-5-RR	GenBank Accession Number: BC002344	Purification Method: Protein A purification
Concentration: 1000 µg/ml	GeneID (NCBI): 6182	CloneNo.: 242622D12
Source: Rabbit	UNIPROT ID: P52815	Recommended Dilutions: WB: 1:2000-1:10000 IHC: 1:250-1:1000 IF/ICC: 1:500-1:2000
Isotype: IgG	Full Name: mitochondrial ribosomal protein L12	
Immunogen Catalog Number: AG6504	Calculated MW: 21 kDa Observed MW: 21 kDa	

## Applications

Tested Applications:  
WB, IHC, IF/ICC, ELISA

Species Specificity:  
human, mouse, rat

**Note-IHC: suggested antigen retrieval with  
TE buffer pH 9.0; (\*) Alternatively, antigen  
retrieval may be performed with citrate  
buffer pH 6.0**

Positive Controls:

WB: COLO 320 cells, A431 cells, U-251 cells, rat colon tissue

IHC: human colon cancer tissue, mouse stomach tissue

IF/ICC: HepG2 cells,

## Background Information

Mammalian MRPL12 was the first mitochondrial ribosomal protein to be characterized, and is encoded by a nuclear gene. The protein forms a homodimer, localizes predominantly to mitochondria and binds to the large mitochondrial ribosomal subunit [PMID:862670]. It is required for CycD/Cdk4-induced cell growth. In addition, forming a ribosomal stalk with MRPL7, MRPL12 is required for the recruitment of translation elongation factors Tu and G to the large ribosomal subunit [PMID:12370014]. It also a part of a novel regulatory mechanism that coordinates mitochondrial transcription with translation and/or ribosome biogenesis during human mitochondrial gene expression.

## Storage

Storage:  
Store at -20°C. Stable for one year after shipment.  
Storage Buffer:  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

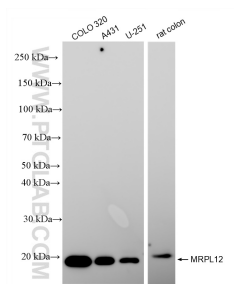
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

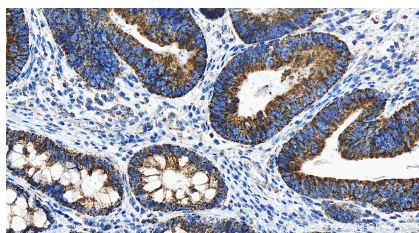
W: [ptgcn.com](http://ptgcn.com)

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

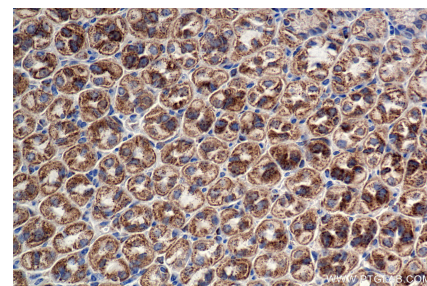
## Selected Validation Data



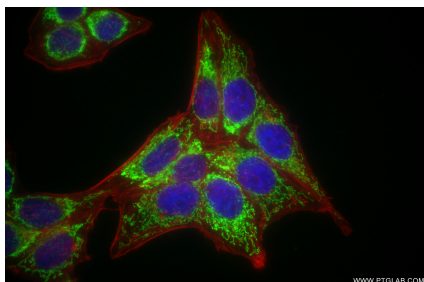
Various lysates were subjected to SDS PAGE followed by western blot with 85070-5-RR (MRPL12 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



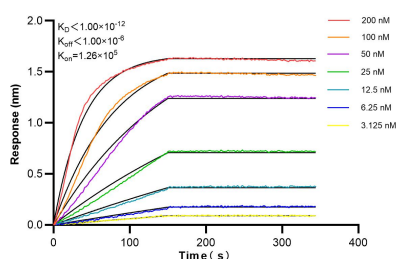
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 85070-5-RR (MRPL12 antibody) at dilution of 1:500 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse stomach tissue slide using 85070-5-RR (MRPL12 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using MRPL12 antibody (85070-5-RR, Clone: 242622D12 ) at dilution of 1:1000 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).



Biolayer interferometry (BLI) kinetic assays of 85070-5-RR against Human MRPL12 were performed. The affinity constant is below 1 pM.