

For Research Use Only

# MTCO2 Recombinant antibody

Catalog Number: 83132-7-RR

Featured Product



## Basic Information

Catalog Number:

83132-7-RR

Size:

100ul, Concentration: 1000 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

YP\_003024029

GeneID (NCBI):

4513

UNIPROT ID:

P00403

Full Name:

cytochrome c oxidase II

Calculated MW:

26 kDa

Observed MW:

23-26 kDa

Purification Method:

Protein A purification

CloneNo.:

230448C9

Recommended Dilutions:

WB 1:5000-1:50000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:500-1:2000

IF/ICC 1:200-1:800

## Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), IP, ELISA

Species Specificity:

human

**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 : HepG2 cells, 143B.TK.P0 cells, 143B cells, HeLa cells, U-251 cells, A549 cells, MDA-MB-231 cells

IP : HeLa cells,

IHC : human ovarian cancer, human stomach cancer tissue

IF/ICC : HepG2 cells,

## Background Information

MTCO2, also named as COII, COXII, and COX2, belongs to the cytochrome c oxidase subunit 2 family. It is the component of the respiratory chain that catalyzes the reduction of oxygen to water. Subunits 1-3 form the functional core of the enzyme complex. Subunit 2 transfers the electrons from cytochrome c via its binuclear copper A center to the bimetallic center of the catalytic subunit 1. Defects in COX2 are a cause of mitochondrial complex IV deficiency (MT-C4D).

## Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

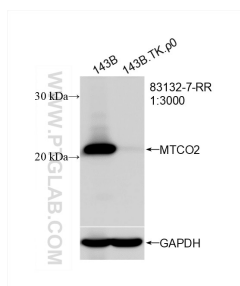
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

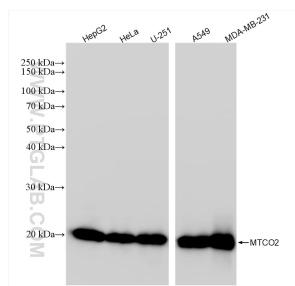
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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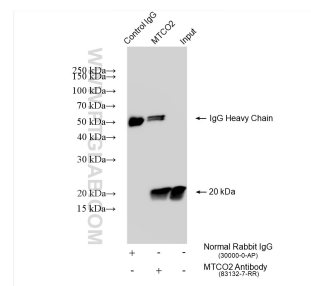
## Selected Validation Data



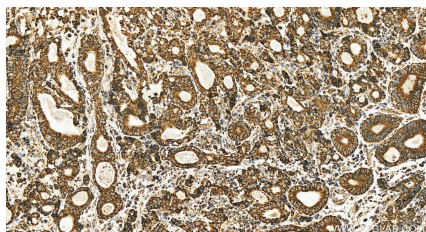
WB result of MTCO2 antibody (MTCO2; 1:3000; incubated at room temperature for 1.5 hours) with 143B and 143B.TK.p0 cell. 143B is wild-type cell line, 143B.TK.p0 is mtDNA deletion cell line.



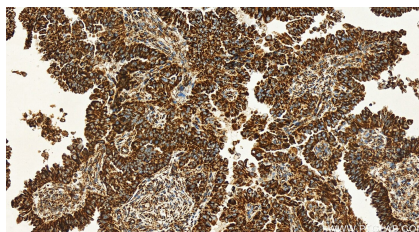
Various lysates were subjected to SDS PAGE followed by western blot with 83132-7-RR (MTCO2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



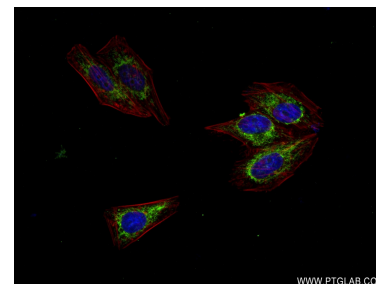
IP result of anti-MTCO2 (IP:83132-7-RR, 4ug; Detection:83132-7-RR 1:3000) with HeLa cells lysate 1750 ug.



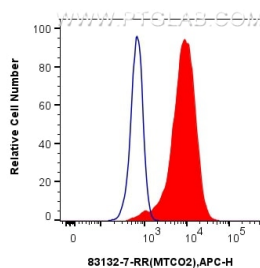
Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue slide using 83132-7-RR (MTCO2 antibody) at dilution of 1:500 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer(pH9).



Immunohistochemical analysis of paraffin-embedded human ovarian cancer tissue slide using 83132-7-RR (MTCO2 antibody) at dilution of 1:1000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using MTCO2 antibody (83132-7-RR, Clone: 230448C9) at dilution of 1:400 and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) (SA00013-1), CL594-Phalloidin (red).



1x10<sup>6</sup> HeLa cells were intracellularly stained with 0.25 ug Anti-Human MTCO2 (83132-7-RR, Clone:230448C9) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Rabbit IgG control Rabbit PolyAb (30000-O-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).