

For Research Use Only

# COXIV Polyclonal antibody

Catalog Number: 11242-1-AP

Featured Product

372 Publications



## Basic Information

### Catalog Number:

11242-1-AP

### Size:

150ul, Concentration: 650 µg/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG1640

### GenBank Accession Number:

BC021236

### GeneID (NCBI):

1327

### Full Name:

cytochrome c oxidase subunit IV isoform 1

### Calculated MW:

19.6 kDa

### Observed MW:

17-18 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:5000-1:20000

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

IHC 1:200-1:1000

IF 1:50-1:500

## Applications

### Tested Applications:

FC, IF, IHC, IP, WB, ELISA

### Cited Applications:

ChIP, IF, IHC, IP, WB

### Species Specificity:

human, mouse, rat

### Cited Species:

human, goat, rat, mouse, pig, canine

**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**: HeLa cells, HepG2 cells, rat liver tissue, rat brain tissue, MCF-7 cells, NIH/3T3 cells, Jurkat cells, mouse skeletal muscle tissue

**IP**: mouse skeletal muscle tissue,

**IHC**: human prostate cancer tissue, human pancreas cancer tissue, human heart tissue

**IF**: HepG2 cells,

## Background Information

COX4l1, also named as COX4 and COXIV-1, belongs to the cytochrome c oxidase IV family. It is one of the nuclear-coded polypeptide chains of cytochrome c oxidase, the terminal oxidase in mitochondrial electron transport. COX4l1 is a marker for mitochondria. It has two isoforms (isoform 1 and 2). Isoform 1(COX4l1) is ubiquitously expressed and isoform 2 is highly expressed in lung tissues. COX4l1 is commonly used as a loading control. This antibody was generated against full length COX4l1 protein and cross reacts with COX4l2.

## Notable Publications

Author	Pubmed ID	Journal	Application
Enrico Zampese	36179023	Sci Adv	IF
Lu Lu	36183875	Environ Pollut	WB
Yipeng Du	30279144	EBioMedicine	WB

## 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

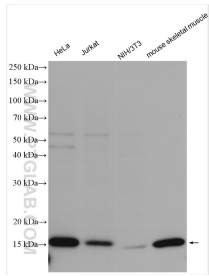
For technical support and original validation data for this product please contact:

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

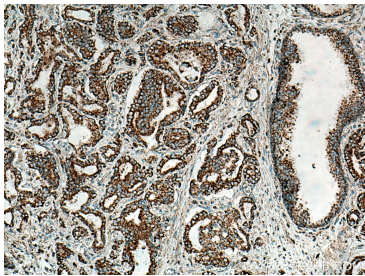
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

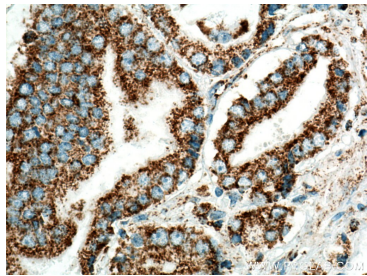
Selected Validation Data



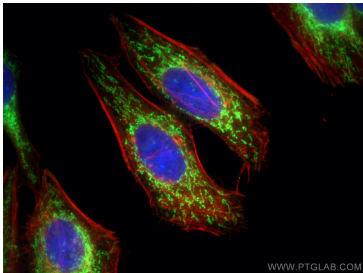
Various lysates were subjected to SDS PAGE followed by western blot with 11242-1-AP (COXIV antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



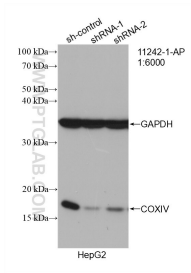
Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 11242-1-AP (COXIV antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



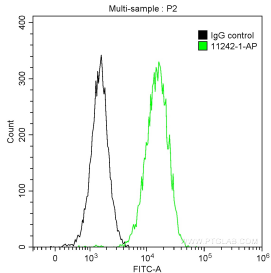
Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 11242-1-AP (COXIV antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



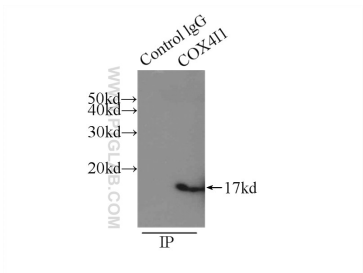
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using COXIV antibody (11242-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution of 1:1000 and CL594-Phalloidin (red).



WB result of COXIV antibody (11242-1-AP; 1:6000; incubated at room temperature for 1.5 hours) with sh-Control and sh-COXIV transfected HepG2 cells.



1X10<sup>6</sup> HepG2 cells were intracellularly stained with 0.2 ug Anti-Human COXIV (11242-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (green), and 0.2 ug Control Antibody. Cells were fixed with 90% MeOH.



IP Result of anti-COXIV (IP:11242-1-AP, 3ug; Detection:11242-1-AP 1:1000) with mouse skeletal muscle tissue lysate 3500ug.