

For Research Use Only

# COXIV Polyclonal antibody

Catalog Number: 11242-1-AP

Featured Product

380 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

### UNIPROT ID:

P13073

### 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:

WB, IP, IF, FC, IHC, ELISA

### Cited Applications:

WB, IP, IF, IHC, ChIP

### 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

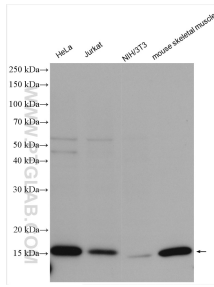
For technical support and original validation data for this product please contact:

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

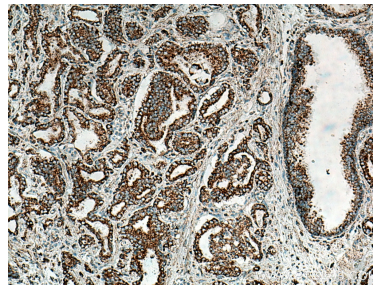
E: proteintech@ptglab.com  
W: ptglab.com

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

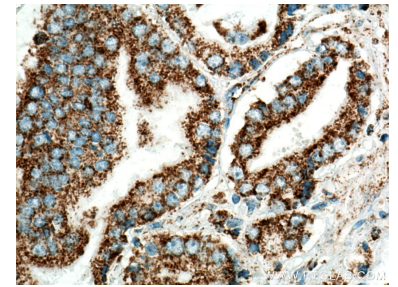
## Selected Validation Data



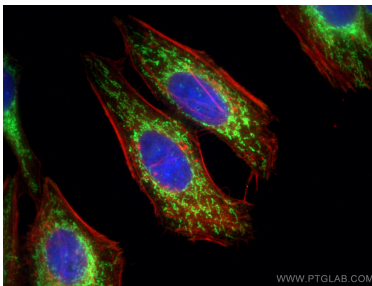
Various lysates were subjected to SDS PAGE followed by western blot with 11242-1-AP (COXIV antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



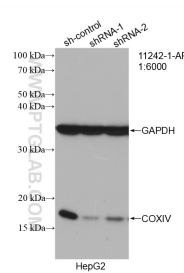
Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 11242-1-AP (COXIV antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



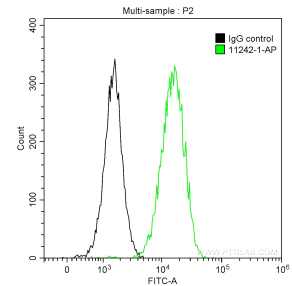
Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 11242-1-AP (COXIV antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



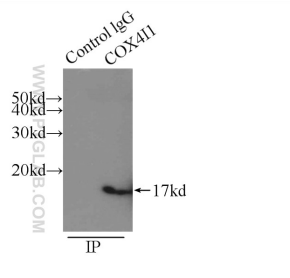
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using COXIV antibody (11242-1-AP) at dilution of 1:200 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



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.



$1 \times 10^6$  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.