For Research Use Only

COXIV Polyclonal antibody

Catalog Number:11242-1-AP Featured Product 661 Publications

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Basic Information

Catalog Number:
11242-1-AP

Size:
150ul , Concentration: 1000 ug/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 ug for 1.0-3.0 mg of total protein lysate
IHC: 1:200-1:1000
IF/ICC: 1:50-1:500

Applications

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

Cited Applications:
WB, IHC, IF, IP, ChIP

Species Specificity:
human, mouse, rat

Cited Species:
human, mouse, rat, pig, canine, bovine, goat

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, HEK-293 cells, HepG2 cells, rat brain tissue, rat liver tissue, mouse heart tissue, mouse liver tissue, mouse lung tissue, Jurkat cells, NIH/3T3 cells, mouse skeletal muscle tissue, MCF-7 cells

IP : mouse skeletal muscle tissue,

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

IF/ICC : HepG2 cells,

Background Information

COX4I1, 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. COX4I1 is a marker for mitochondria. It has two isoforms (isoform 1 and 2). Isoform 1(COX4I1) is ubiquitously expressed and isoform 2 is highly expressed in lung tissues. COX4I1 is commonly used as a loading control. This antibody was generated against full length COX4I1 protein and cross reacts with COX4I2.

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

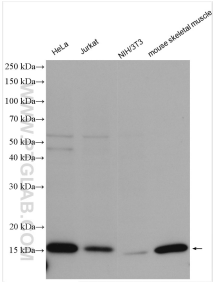
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

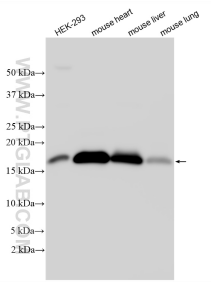
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

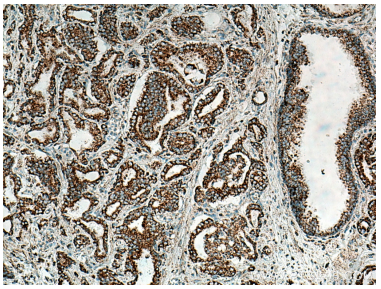
Selected Validation Data



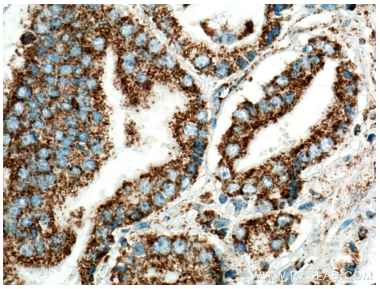
Various lysates were subjected to SDS PAGE followed by western blot with 11242-1-AP (COXIV antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



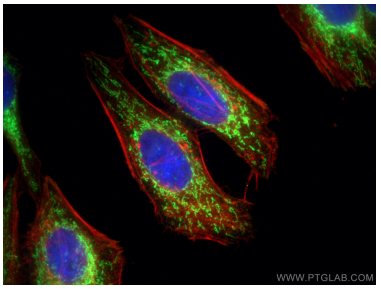
Various lysates were subjected to SDS PAGE followed by western blot with 11242-1-AP (COXIV antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



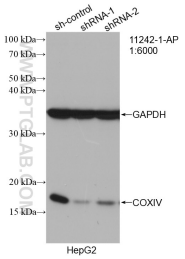
Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 11242-1-AP (COXIV antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



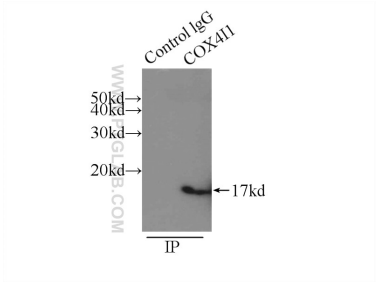
Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 11242-1-AP (COXIV antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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.



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