

# [KD Validated] COX IV Rabbit pAb

Catalog No.: A22871

## Basic Information

### Observed MW

17kDa

### Calculated MW

20kDa

### Category

Primary antibody

### Applications

WB,IHC-P,IF/ICC,ELISA

### Cross-Reactivity

Human, Mouse, Rat

## Background

Cytochrome c oxidase (COX) is the terminal enzyme of the mitochondrial respiratory chain. It is a multi-subunit enzyme complex that couples the transfer of electrons from cytochrome c to molecular oxygen and contributes to a proton electrochemical gradient across the inner mitochondrial membrane. The complex consists of 13 mitochondrial- and nuclear-encoded subunits. The mitochondrially-encoded subunits perform the electron transfer and proton pumping activities. The functions of the nuclear-encoded subunits are unknown but they may play a role in the regulation and assembly of the complex. This gene encodes the nuclear-encoded subunit IV isoform 1 of the human mitochondrial respiratory chain enzyme. It is located at the 3' of the NOC4 (neighbor of COX4) gene in a head-to-head orientation, and shares a promoter with it. Pseudogenes related to this gene are located on chromosomes 13 and 14. Alternative splicing results in multiple transcript variants encoding different isoforms.

## Recommended Dilutions

**WB** 1:500 - 1:1000

**IHC-P** 1:50 - 1:200

**IF/ICC** 1:50 - 1:200

**ELISA** Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

## Immunogen Information

### Gene ID

1327

### Swiss Prot

P13073

### Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids 23-98 of human COX IV. (NP\_001852.1).

### Synonyms

COX4; COXIV; COX4-1; COXIV-1; MC4DN16; COX IV-1; [KD Validated] COX IV

## Contact

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 | [www.abclonal.com.cn](http://www.abclonal.com.cn)

## Product Information

### Source

Rabbit

### Isotype

IgG

### Purification

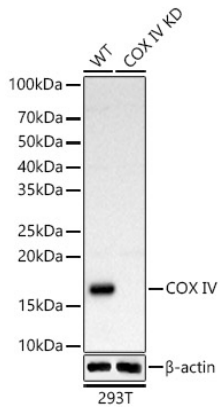
Affinity purification

### Storage

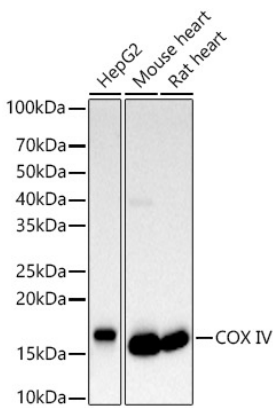
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.01% thimerosal, 50% glycerol, pH7.3.

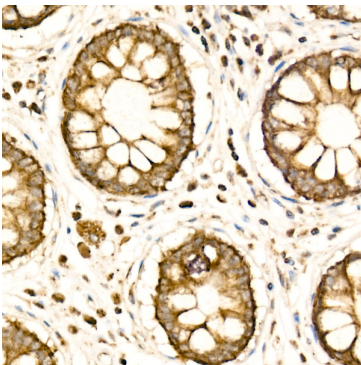
## Validation Data



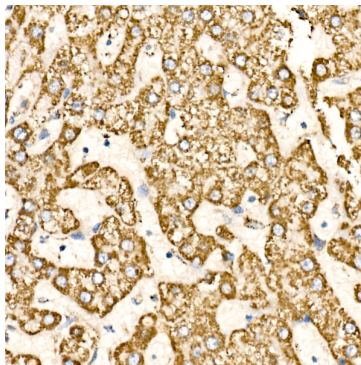
Western blot analysis of lysates from wild type (WT) and COX IV knockdown (KD) 293T cells, using [KD Validated] COX IV Rabbit pAb (A22871) at 1:500 dilution.  
 Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.  
 Lysates/proteins: 25 µg per lane.  
 Blocking buffer: 3% nonfat dry milk in TBST.  
 Detection: ECL Basic Kit (RM00020).  
 Exposure time: 10s.



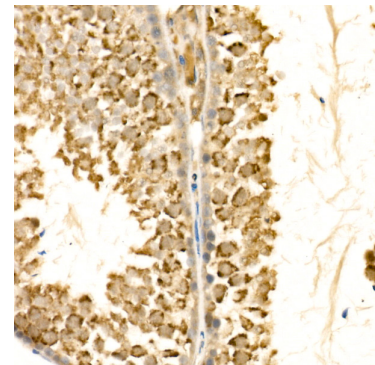
Western blot analysis of various lysates, using [KD Validated] COX IV Rabbit pAb (A22871) at 1:500 dilution.  
 Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.  
 Lysates/proteins: 25 µg per lane.  
 Blocking buffer: 3% nonfat dry milk in TBST.  
 Detection: ECL Basic Kit (RM00020).  
 Exposure time: 10s.



Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma using [KD Validated] COX IV Rabbit pAb (A22871) at dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IHC staining.



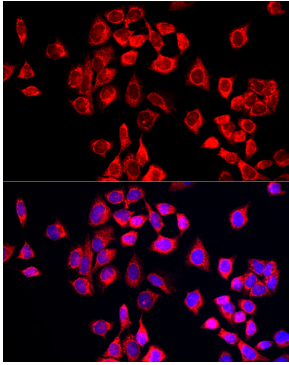
Immunohistochemistry analysis of paraffin-embedded Human liver using [KD Validated] COX IV Rabbit pAb (A22871) at dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IHC staining.



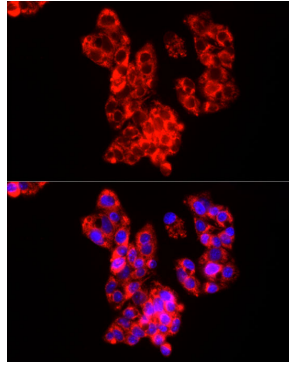
Immunohistochemistry analysis of paraffin-embedded Mouse testis using [KD Validated] COX IV Rabbit pAb (A22871) at dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IHC staining.

## Validation Data

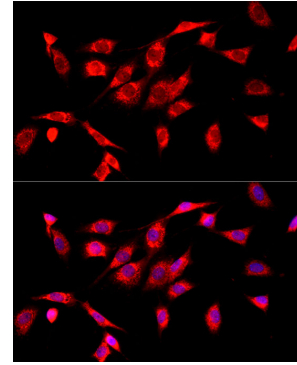
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Immunofluorescence analysis of HeLa cells using [KD Validated] COX IV Rabbit pAb (A22871) at dilution of 1:50 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of HepG2 cells using [KD Validated] COX IV Rabbit pAb (A22871) at dilution of 1:50 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of NIH/3T3 cells using [KD Validated] COX IV Rabbit pAb (A22871) at dilution of 1:50 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.