

A11631

Leader in Biomolecular Solutions for Life Science



# COX IV Rabbit mAb

Catalog No.: A11631

Recombinant

11 Publications

## Basic Information

### Observed MW

17kDa

### Calculated MW

20kDa

### Category

SMab Recombinant Monoclonal  
Antibody

### Applications

WB,IHC-P,ELISA

### Cross-Reactivity

Human,Mouse,Rat

### CloneNo number

ARC2518

## Recommended Dilutions

**WB** 1:1000 - 1:2000

**IHC-P** 1:200 - 1:2000

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

## Contact

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

## 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.

## Immunogen Information

### Gene ID

1327

### Swiss Prot

P13073

### Immunogen

Synthetic peptide. This information is considered to be commercially sensitive.

### Synonyms

COX4; COXIV; COX4-1; COXIV-1; MC4DN16; COX IV-1; COX IV

## Product Information

### Source

Rabbit

### Isotype

IgG

### Purification

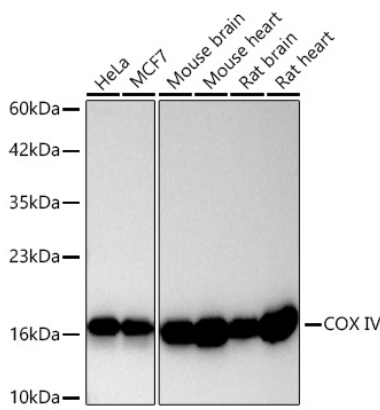
Affinity purification

### Storage

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

Buffer: PBS containing 50% glycerol and 0.05% BSA, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

## Validation Data



Western blot analysis of various lysates using COX IV Rabbit mAb (A11631) at 1:1000 dilution incubated overnight at 4°C.

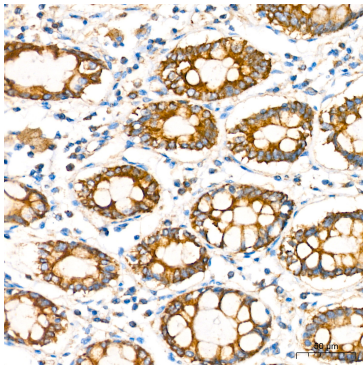
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25 µg per lane.

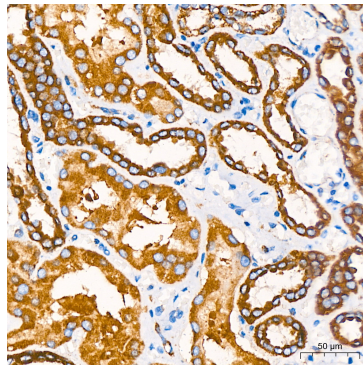
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

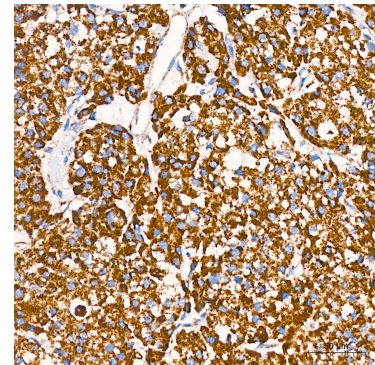
Exposure time: 10s.



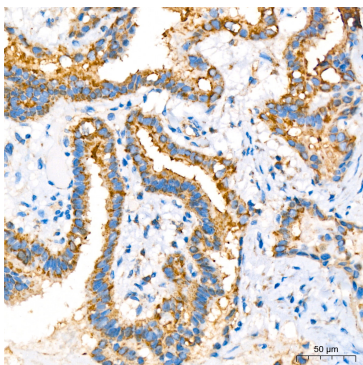
Immunohistochemistry analysis of paraffin-embedded Human colon using COX IV Rabbit mAb (A11631) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



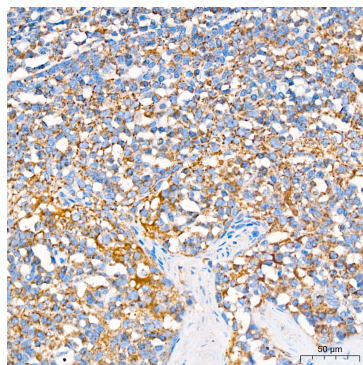
Immunohistochemistry analysis of paraffin-embedded Human kidney using COX IV Rabbit mAb (A11631) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human liver cancer using COX IV Rabbit mAb (A11631) at dilution of 1:200 (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 thyroid cancer using COX IV Rabbit mAb (A11631) at dilution of 1:200 (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 tonsil using COX IV Rabbit mAb (A11631) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.