# **COX IV Rabbit pAb**

Catalog No.: A6564 49 Publications



## **Basic Information**

### **Observed MW**

17kDa

### **Calculated MW**

20kDa

#### Category

Polyclonal Antibody

### **Applications**

WB,IHC-P,IF/ICC,IP,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** 1:1000 - 1:5000

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

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

**IP** 0.5μg-4μg antibody for

200µg-400µg extracts

of whole cells

**ELISA** Recommended starting

concentration is 1 µg/mL. Please optimize the concentration based on your specific

assay requirements.

### **Contact**

www.abclonal.com

# **Immunogen Information**

Gene ID Swiss Prot 1327 P13073

### **Immunogen**

Recombinant protein (or fragment). This information is considered to be commercially sensitive.

### **Synonyms**

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

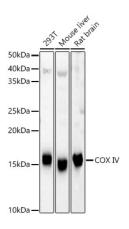
### **Product Information**

SourceIsotypePurificationRabbitIgGAffinity purification

#### Storage

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

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



Western blot analysis of various lysates using COX IV Rabbit pAb (A6564) at 1:2000

dilution.

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

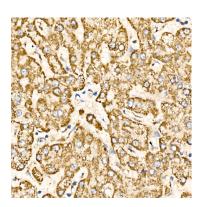
dilution.

Lysates/proteins: 25µg per lane.

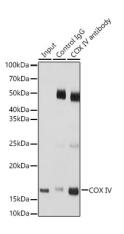
Blocking buffer: 3% nonfat dry milk in TBST.

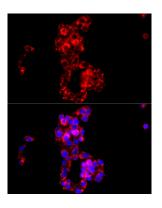
Detection: ECL Basic Kit (RM00020).

Exposure time: 10s.



Immunohistochemistry analysis of paraffin-embedded Human liver using COX IV Rabbit pAb (A6564) at dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.





Immunofluorescence analysis of HepG2 cells using COX IV Rabbit pAb (A6564) 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.

Immunoprecipitation analysis of 200  $\mu$ g extracts of HeLa cells using 3  $\mu$ g COX IV antibody (A6564). Western blot was performed from the immunoprecipitate using COX IV antibody (A6564) at a dilution of 1:1000.