

## **Anti-COX IV Rabbit Monoclonal Antibody**

**Catalog # ABO16070** 

## **Specification**

# **Anti-COX IV Rabbit Monoclonal Antibody - Product Information**

Application WB, IHC, IF, ICC, IP, FC

Primary Accession
Host
Rabbit
Isotype
IgG

Reactivity Rat, Human, Mouse

Clonality Monoclonal Format Liquid

**Description** 

Anti-COX IV Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

## **Anti-COX IV Rabbit Monoclonal Antibody - Additional Information**

#### **Gene ID 1327**

### **Other Names**

Cytochrome c oxidase subunit 4 isoform 1, mitochondrial, Cytochrome c oxidase polypeptide IV, Cytochrome c oxidase subunit IV isoform 1, COX IV-1, COX4I1 (<a href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=2265" target="blank">HGNC:2265</a>)

### **Calculated MW**

17 kDa KDa

#### **Application Details**

WB 1:500-1:2000<br>IHC 1:50-1:200<br>ICC/IF 1:50-1:200<br>IP 1:50<br>FC 1:50

### **Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

# Immunogen

A synthesized peptide derived from COX IV

#### **Purification**

Affinity-chromatography

Storage Store at -20°C for one year. For short term

storage and frequent use, store at 4°C for

up to one month. Avoid repeated

freeze-thaw cycles.

# **Anti-COX IV Rabbit Monoclonal Antibody - Protein Information**



# Name COX4I1 (HGNC:2265)

#### **Function**

Component of the cytochrome c oxidase, the last enzyme in the mitochondrial electron transport chain which drives oxidative phosphorylation. The respiratory chain contains 3 multisubunit complexes succinate dehydrogenase (complex II, CII), ubiquinol- cytochrome c oxidoreductase (cytochrome b-c1 complex, complex III, CIII) and cytochrome c oxidase (complex IV, CIV), that cooperate to transfer electrons derived from NADH and succinate to molecular oxygen, creating an electrochemical gradient over the inner membrane that drives transmembrane transport and the ATP synthase. Cytochrome c oxidase is the component of the respiratory chain that catalyzes the reduction of oxygen to water. Electrons originating from reduced cytochrome c in the intermembrane space (IMS) are transferred via the dinuclear copper A center (CU(A)) of subunit 2 and heme A of subunit 1 to the active site in subunit 1, a binuclear center (BNC) formed by heme A3 and copper B (CU(B)). The BNC reduces molecular oxygen to 2 water molecules using 4 electrons from cytochrome c in the IMS and 4 protons from the mitochondrial matrix.

#### **Cellular Location**

Mitochondrion inner membrane; Single-pass membrane protein

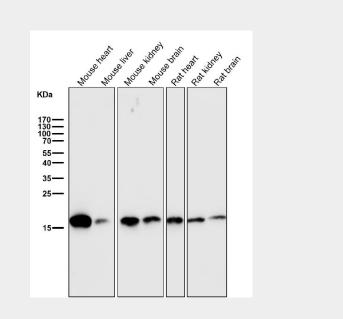
**Tissue Location** Ubiquitous.

## **Anti-COX IV Rabbit Monoclonal Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

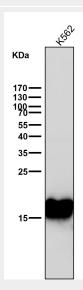
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

#### Anti-COX IV Rabbit Monoclonal Antibody - Images

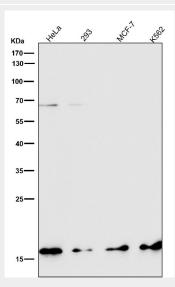




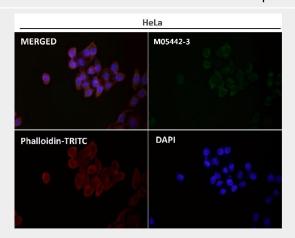
All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.



All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.



All lanes use the Antibody at 1:3K dilution for 1 hour at room temperature.



Immunofluorescent analysis using the Antibody at 1:500 dilution.



