

### **COX4 Polyclonal Antibody**

**Catalog # AP63496** 

#### **Specification**

### **COX4 Polyclonal Antibody - Product Information**

Application WB, IHC-P Primary Accession P13073

Reactivity Human, Mouse, Rat

Host Rabbit Clonality Polyclonal

# **COX4 Polyclonal Antibody - Additional Information**

**Gene ID 1327** 

**Other Names** 

COX4I1; COX4; Cytochrome c oxidase subunit 4 isoform 1, mitochondrial; Cytochrome c oxidase polypeptide IV; Cytochrome c oxidase subunit IV isoform 1; COX IV-1

**Dilution** 

WB~~WB: 1:1000 IHC: 1:500-1000

IHC-P~~N/A

**Format** 

PBS, pH 7.4, containing 0.09% (W/V) sodium azide as Preservative and 50% Glycerol.

**Storage Conditions** 

-20°C

#### **COX4 Polyclonal 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

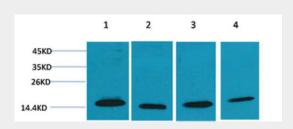
Tissue Location Ubiquitous.

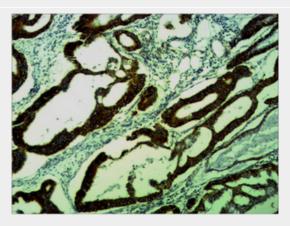
### **COX4 Polyclonal Antibody - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## **COX4 Polyclonal Antibody - Images**





# **COX4 Polyclonal Antibody - Background**

This protein is one of the nuclear-coded polypeptide chains of cytochrome c oxidase, the terminal oxidase in mitochondrial electron transport.