

### **COX6A1 Antibody**

Rabbit Polyclonal Antibody Catalog # ALS16180

### **Specification**

### **COX6A1 Antibody - Product Information**

Application IHC
Primary Accession P12074
Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 12kDa KDa

# **COX6A1 Antibody - Additional Information**

**Gene ID 1337** 

#### **Other Names**

Cytochrome c oxidase subunit 6A1, mitochondrial, Cytochrome c oxidase polypeptide VIa-liver, Cytochrome c oxidase subunit VIA-liver, COX VIa-L, COX6A1, COX6AL

### Target/Specificity Human COX6A1

### **Reconstitution & Storage**

Aliquot and store at -20°C or -80°C. Avoid freeze-thaw cycles.

## **Precautions**

COX6A1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### **COX6A1 Antibody - Protein Information**

#### Name COX6A1

### **Synonyms** COX6AL

### **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 unsing 4



electrons from cytochrome c in the IMS and 4 protons from the mitochondrial matrix.

#### **Cellular Location**

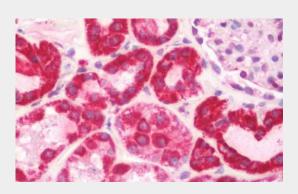
Mitochondrion inner membrane; Single-pass membrane protein

### **COX6A1 Antibody - Protocols**

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

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

## COX6A1 Antibody - Images



Anti-COX6A1 antibody IHC staining of human kidney.

### **COX6A1 Antibody - Background**

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

### **COX6A1 Antibody - References**

Ota T.,et al.Nat. Genet. 36:40-45(2004). Scherer S.E.,et al.Nature 440:346-351(2006). Fabrizi G.M.,et al.Nucleic Acids Res. 17:6409-6409(1989). Hochstrasser D.F.,et al.Electrophoresis 13:992-1001(1992).