

### **Anti-COX1 Antibody**

Rabbit polyclonal antibody to COX1 Catalog # AP61200

# **Specification**

### **Anti-COX1 Antibody - Product Information**

Application WB
Primary Accession P00395
Other Accession P00397

Reactivity Human, Mouse, Rat, Pig, Bovine, SARS,

Host Rabbit
Clonality Polyclonal
Calculated MW 57041

#### **Anti-COX1 Antibody - Additional Information**

**Gene ID 4512** 

#### **Other Names**

COI; COXI; MTCO1; Cytochrome c oxidase subunit 1; Cytochrome c oxidase polypeptide I

# **Target/Specificity**

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human COX1. The exact sequence is proprietary.

#### **Dilution**

WB~~WB (1/500 - 1/1000)

#### **Format**

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

### **Storage**

Store at -20 °C. Stable for 12 months from date of receipt

### **Anti-COX1 Antibody - Protein Information**

Name MT-CO1

Synonyms COI, COXI, MTCO1

#### **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**

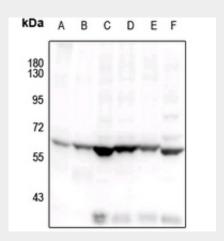
Mitochondrion inner membrane; Multi-pass membrane protein

# **Anti-COX1 Antibody - Protocols**

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

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

# Anti-COX1 Antibody - Images



Western blot analysis of COX1 expression in mouse brain (A), rat skin (B), CT26 (C), C6 (D), Hela (E), A375 (F) whole cell lysates.

# **Anti-COX1 Antibody - Background**

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