

# COX4I2 Polyclonal Antibody

Catalog # AP69258

#### **Product Information**

Application WB, IHC-P, IF Primary Accession O96KI9

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW20010

### **Additional Information**

**Gene ID** 84701

Other Names COX4I2; COX4L2; Cytochrome c oxidase subunit 4 isoform 2; mitochondrial;

Cytochrome c oxidase subunit IV isoform 2; COX IV-2

Dilution WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300.

Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other

applications. IHC-P~~N/A IF~~1:50~200

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

Storage Conditions -20°C

#### **Protein Information**

Name COX4I2 ( HGNC:16232)

**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 {ECO:0000250 | UniProtKB:P00423};

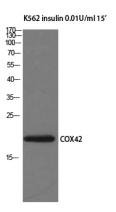
Single-pass membrane protein {ECO:0000250 | UniProtKB:P00423}

**Tissue Location** Highly expressed in lung.

# **Background**

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

## **Images**



Western Blot analysis of K562 insulin 0.01U/ml 15' cells using COX4I2 Polyclonal Antibody

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