

**COXIV Isoform 2 Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP22137a****Specification**

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**COXIV Isoform 2 Antibody - Product Information**

Application	WB,E
Primary Accession	<a href="#">O96KJ9</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Calculated MW	20010
Antigen Region	141-171

**COXIV Isoform 2 Antibody - Additional Information****Gene ID** 84701**Other Names**

Cytochrome c oxidase subunit 4 isoform 2, mitochondrial, Cytochrome c oxidase subunit IV isoform 2, COX IV-2, COX4I2, COX4L2

**Target/Specificity**

This COXIV Isoform 2 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 141-171 amino acids from human COXIV Isoform 2.

**Dilution**

WB~~1:2000

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

COXIV Isoform 2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**COXIV Isoform 2 Antibody - 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

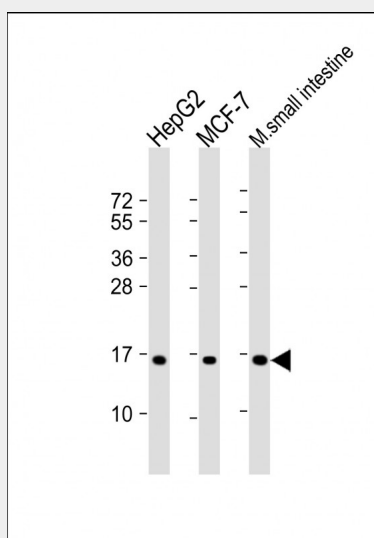
Highly expressed in lung.

### COXIV Isoform 2 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 Cytometry](#)
- [Cell Culture](#)

### COXIV Isoform 2 Antibody - Images



All lanes : Anti-COXIV Isoform 2 Antibody at 1:2000 dilution Lane 1: HepG2 whole cell lysate Lane 2: MCF-7 whole cell lysate Lane 3: mouse small intestine lysate Lysates/proteins at 20 µg per lane.

Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 20 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

#### **COXIV Isoform 2 Antibody - Background**

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

#### **COXIV Isoform 2 Antibody - References**

Huettemann M.,et al.Gene 267:111-123(2001).  
Deloukas P.,et al.Nature 414:865-871(2001).  
Shteyer E.,et al.Am. J. Hum. Genet. 84:412-417(2009).