

COXIV Isoform 2 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22137a

Specification

COXIV Isoform 2 Antibody - Product Information

Application WB,E Primary Accession Q96KJ9

Reactivity Human, Mouse

Host Rabbit
Clonality polyclonal
Isotype Rabbit Ig
Calculated MW 20010

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

Format

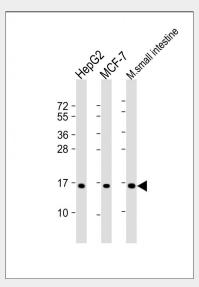
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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



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).



therapeutic procedures.

COXIV Isoform 2 Antibody - Protein Information

Name COX4I2

Synonyms COX4L2

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 subunbit 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

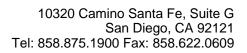
Mitochondrion inner membrane {ECO:0000250|UniProtKB:P00423}; Single-pass membrane protein {ECO:0000250|UniProtKB:P00423}

Tissue LocationHighly 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
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture