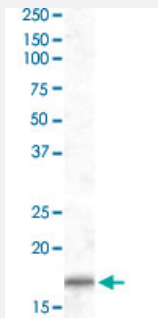


COX4I1/COX4I2 polyclonal antibody

Catalog # PAB17042 Size 100 ug

Applications



Western Blot (Tissue lysate)

COX4I1/COX4I2 polyclonal antibody (Cat # PAB17042) (1 ug/mL) staining of human skeletal muscle lysate (35 ug protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Specification

Product Description Goat polyclonal antibody raised against synthetic peptide of COX4I1/COX4I2.

Immunogen A synthetic peptide corresponding to human COX4I1/COX4I2.

Sequence C-RWDYEKKQWKK

Host Goat

Theoretical MW (kDa) 19.6

Reactivity Human

Form Liquid

Purification Antigen affinity purification

Concentration 0.5 mg/mL

Recommend Usage ELISA (1:2000)
Western Blot (1-3 ug/mL)
The optimal working dilution should be determined by the end user.

Storage Buffer In Tris saline, pH 7.3 (0.5% BSA, 0.02% sodium azide)

Storage Instruction

Store at -20°C.
Aliquot to avoid repeated freezing and thawing.

Note

This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Tissue lysate)

COX4I1/COX4I2 polyclonal antibody (Cat # PAB17042) (1 ug/mL) staining of human skeletal muscle lysate (35 ug protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

- Enzyme-linked Immunoabsorbent Assay

Gene Info — COX4I1

Entrez GeneID[1327](#)**Protein Accession#**[NP_115998.2](#)**Gene Name**

COX4I1

Gene Alias

COX4, COXIV, MGC72016

Gene Description

cytochrome c oxidase subunit IV isoform 1

Omim ID[123864](#)**Gene Ontology**[Hyperlink](#)**Gene Summary**

Cytochrome c oxidase (COX) is the terminal enzyme of the mitochondrial respiratory chain. It is a multi-subunit enzyme complex that couples the transfer of electrons from cytochrome c to molecular oxygen and contributes to a proton electrochemical gradient across the inner mitochondrial membrane. The complex consists of 13 mitochondrial- and nuclear-encoded subunits. The mitochondrially-encoded subunits perform the electron transfer and proton pumping activities. The functions of the nuclear-encoded subunits are unknown but they may play a role in the regulation and assembly of the complex. This gene encodes the nuclear-encoded subunit IV isoform 1 of the human mitochondrial respiratory chain enzyme. It is located at the 3' of the NOC4 (neighbor of COX4) gene in a head-to-head orientation, and shares a promoter with it. [provided by RefSeq]

Other Designations

-

Gene Info — COX4I2

Entrez GeneID	84701
Protein Accession#	NP_115998.2
Gene Name	COX4I2
Gene Alias	COX4, COX4-2, COX4B, COX4L2, COXIV-2, dJ857M17.2
Gene Description	cytochrome c oxidase subunit IV isoform 2 (lung)
Omim ID	607976
Gene Ontology	Hyperlink
Gene Summary	Cytochrome c oxidase (COX), the terminal enzyme of the mitochondrial respiratory chain, catalyzes the electron transfer from reduced cytochrome c to oxygen. It is a heteromeric complex consisting of 3 catalytic subunits encoded by mitochondrial genes and multiple structural subunits encoded by nuclear genes. The mitochondrially-encoded subunits function in electron transfer, and the nuclear-encoded subunits may be involved in the regulation and assembly of the complex. This nuclear gene encodes isoform 2 of subunit IV. Isoform 1 of subunit IV is encoded by a different gene, however, the two genes show a similar structural organization. Subunit IV is the largest nuclear encoded subunit which plays a pivotal role in COX regulation. [provided by RefSeq]
Other Designations	OTTHUMP00000030533 cytochrome c oxidase subunit IV isoform 2 cytochrome c oxidase subunit IV-like 2

Publication Reference

- [HIF-1 regulates cytochrome oxidase subunits to optimize efficiency of respiration in hypoxic cells.](#)

Fukuda R, Zhang H, Kim JW, Shimoda L, Dang CV, Semenza GL.

Cell 2007 Apr; 129(1):111.

Application: WB, Human, Mouse, HeLa cells, Mouse embryo fibroblasts

Pathway

- [Cardiac muscle contraction](#)
- [Cardiac muscle contraction](#)
- [Metabolic pathways](#)
- [Metabolic pathways](#)
- [Oxidative phosphorylation](#)

- [Oxidative phosphorylation](#)

Disease

- [Genetic Predisposition to Disease](#)
- [Prostatic Neoplasms](#)