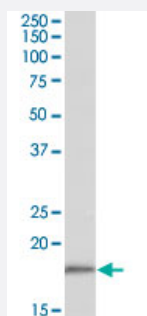


COX4I1/COX4I2 polyclonal antibody

Catalog # PAB7322

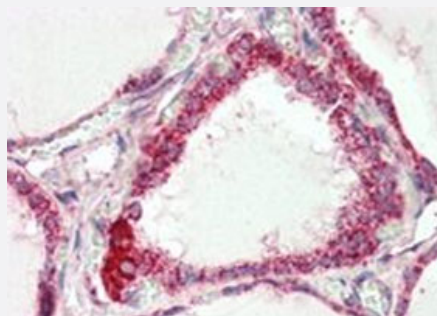
Size 100 ug

Applications



Western Blot (Tissue lysate)

COX4I1/COX4I2 polyclonal antibody (Cat # PAB7322) (0.01 ug/mL) staining of human muscle lysate (35 ug protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

COX4I1/COX4I2 polyclonal antibody (Cat # PAB7322, 2.5 ug/mL) staining of paraffin embedded human thyroid gland. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

Specification

Product Description	Goat polyclonal antibody raised against synthetic peptide of COX4I1/COX4I2.
Immunogen	A synthetic peptide corresponding to human COX4I1/COX4I2.
Sequence	C-QGLASKWDYEKNE
Host	Goat
Theoretical MW (kDa)	19.6
Reactivity	Human
Form	Liquid

Purification	Antigen affinity purification
Concentration	0.5 mg/mL
Quality Control Testing	Antibody Reactive Against Synthetic Peptide.
Recommend Usage	ELISA (1:4000) Western blot (0.01-0.03 ug/mL) Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) (2-4 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

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- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

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- Enzyme-linked Immunoabsorbent Assay

Gene Info — COX4I1

Entrez GeneID	1327
Protein Accession#	NP_001852.1
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_001852.1](#)

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](#)