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COXIV / COX4 Antibody (C-Terminus)
Goat Polyclonal Antibody
Catalog # ALS12730

Specification

COXIV / COX4 Antibody (C-Terminus) - Product Information

Application	**WB, IHC**
Primary Accession	P13073
Reactivity	**Human, Monkey**
Host	**Goat**
Clonality	**Polyclonal**
Calculated MW	**20kDa KDa**

COXIV / COX4 Antibody (C-Terminus) - Additional Information

Gene ID 1327

Other Names
Cytochrome c oxidase subunit 4 isoform 1, mitochondrial, Cytochrome c oxidase polypeptide IV, Cytochrome c oxidase subunit IV isoform 1, COX IV-1, COX4I1, COX4

Target/Specificity
Human COX4I1. This antibody is expected to recognize COX4I1 (GeneID:1327; MW: 19.6kDa) & COX4I2 (GeneID:84701, MW:19.6kDa).

Reconstitution & Storage
Store at -20°C. Minimize freezing and thawing.

Precautions
COXIV / COX4 Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

COXIV / COX4 Antibody (C-Terminus) - Protein Information

Name COX4I1 (HGNC:2265)

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; Single-pass membrane protein

Tissue Location
Ubiquitous.

COXIV / COX4 Antibody (C-Terminus) - Protocols

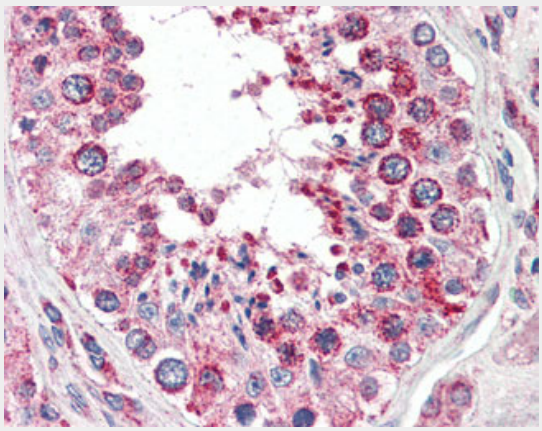
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

COXIV / COX4 Antibody (C-Terminus) - Images



Antibody (0.01 ug/ml) staining of human muscle lysate (35 ug protein in RIPA buffer).



Anti-COX4I1 antibody IHC of human testis.

COXIV / COX4 Antibody (C-Terminus) - Background

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

COXIV / COX4 Antibody (C-Terminus) - References

Zeviani M.,et al.Gene 55:205-217(1987).
Lomax M.I.,et al.Gene 86:209-216(1990).
Park S.J.,et al.Submitted (OCT-1990) to the EMBL/GenBank/DDBJ databases.
Yu W.,et al.Submitted (MAR-1997) to the EMBL/GenBank/DDBJ databases.
Bachman N.J.,et al.Submitted (MAY-1997) to the EMBL/GenBank/DDBJ databases.