

Catalog # AF4394a

Goat anti-COX4I1, Biotinylated Antibody Peptide-affinity purified goat antibody

### Specification

# Goat anti-COX4I1, Biotinylated Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Calculated MW WB, IHC, Pep-ELISA <u>P13073</u> <u>NP\_001852.1</u>, <u>NP\_001305726.1</u> Human Goat Polyclonal 19577

### Goat anti-COX4I1, Biotinylated Antibody - Additional Information

Gene ID 1327

**Other Names** COX4I1; cytochrome c oxidase subunit IV isoform 1; COX4; COX4-1; COXIV; COXIV-1; cytochrome c oxidase polypeptide IV

**Dilution** WB~~1:1000 IHC~~1:100~500 Pep-ELISA~~N/A

Format

Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and thawing.

Immunogen This antibody is expected to recognize reported isoforms 1 and 4 (NP\_001852.1; NP\_001305726.1). Reported variants represent identical protein: NP\_001305715.1, NP\_001852.1. This product may cross-react to COX4I2 (GeneID 84701).

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** Goat anti-COX4I1, Biotinylated Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### Goat anti-COX4I1, Biotinylated Antibody - 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.

## Goat anti-COX4I1, Biotinylated Antibody - Protocols

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

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Goat anti-COX4I1, Biotinylated Antibody - Images