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Goat anti-COX4I1, Biotinylated Antibody

Peptide-affinity purified goat antibody
Catalog # AF4394a

Product Information

Application	WB, IHC, Pep-ELISA
Primary Accession	P13073
Other Accession	NP_001852.1, NP_001305726.1
Reactivity	Human
Host	Goat
Clonality	Polyclonal
Clone Names	COX4I1
Calculated MW	19577

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.

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.