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COX IV Monoclonal Antibody(6C8)

Catalog # AP63294

Product Information

Application	WB, IHC-P, IF
Primary Accession	P13073
Reactivity	Human, Rat, Mouse
Host	Mouse
Clonality	Monoclonal
Calculated MW	19577

Additional Information

Gene ID	1327
Other Names	COX4I1; COX4; Cytochrome c oxidase subunit 4 isoform 1, mitochondrial; Cytochrome c oxidase polypeptide IV; Cytochrome c oxidase subunit IV isoform 1; COX IV-1
Dilution	WB~~WB: 1:1000-3000 IF 1:200 IHC 1:50-300 IHC-P~~N/A IF~~1:50~200
Format	PBS, pH 7.4, containing 0.09% (W/V) sodium azide as Preservative and 50% Glycerol.
Storage Conditions	-20℃

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.

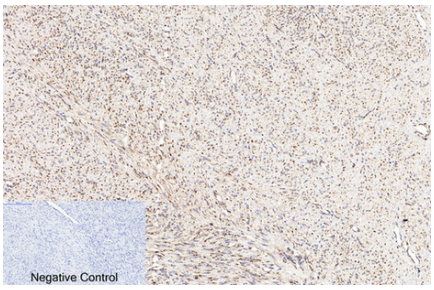
Cellular Location Mitochondrion inner membrane; Single-pass membrane protein

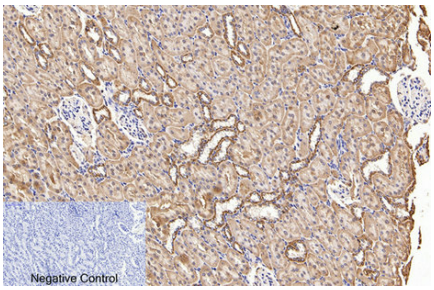
Tissue Location Ubiquitous.

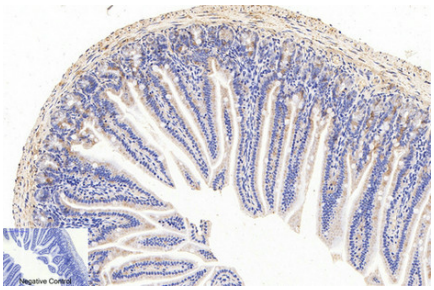
Background

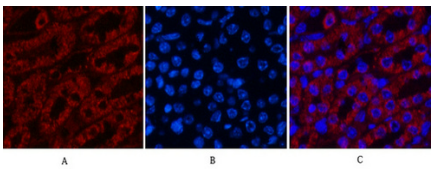
This protein is one of the nuclear-coded polypeptide chains of cytochrome c oxidase, the terminal oxidase in mitochondrial electron transport.

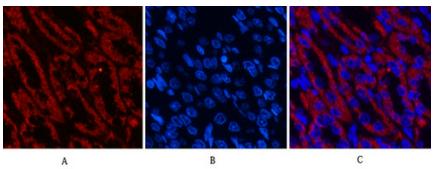
Images

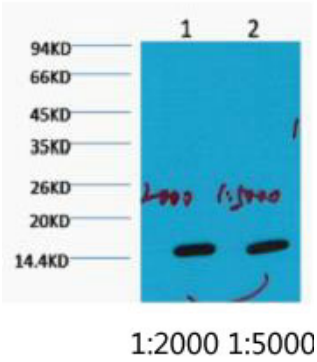












1:2000 1:5000

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