

**COX IV Monoclonal Antibody(6C8)**  
**Catalog # AP63294****Specification**

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**COX IV Monoclonal Antibody(6C8) - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | WB, IHC-P, IF          |
| Primary Accession | <a href="#">P13073</a> |
| Reactivity        | Human, Rat, Mouse      |
| Host              | Mouse                  |
| Clonality         | Monoclonal             |

**COX IV Monoclonal Antibody(6C8) - 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°C

**COX IV Monoclonal Antibody(6C8) - 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

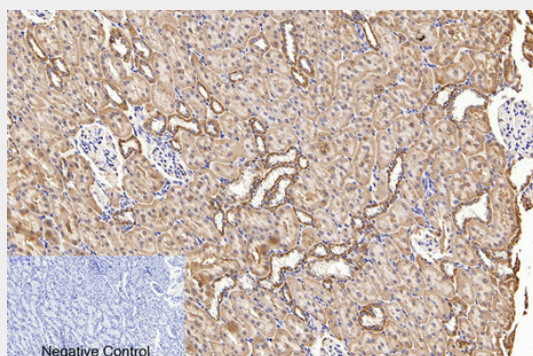
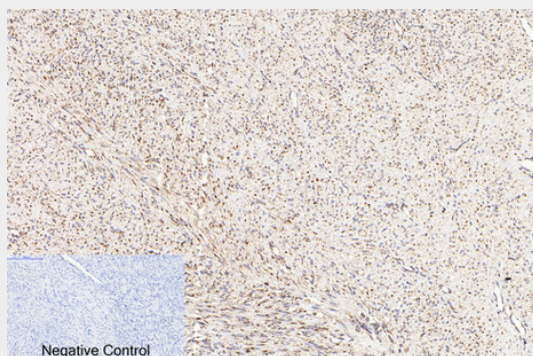
**Tissue Location**

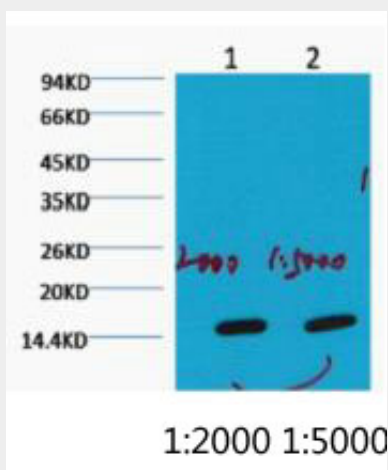
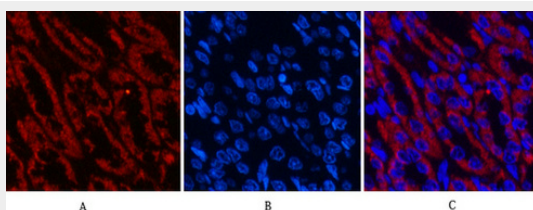
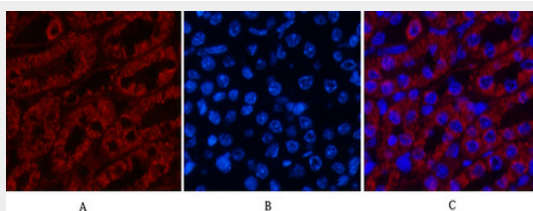
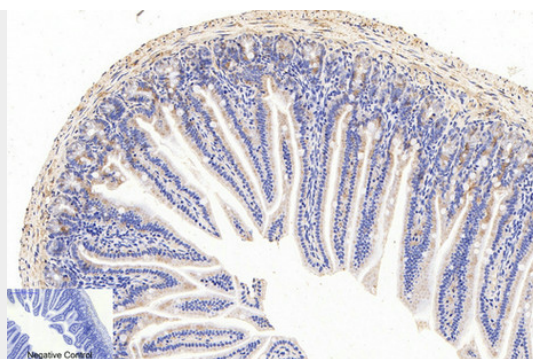
Ubiquitous.

**COX IV Monoclonal Antibody(6C8) - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**COX IV Monoclonal Antibody(6C8) - Images**



### COX IV Monoclonal Antibody(6C8) - Background

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