

**MTCO2 Antibody**  
**Rabbit mAb**  
**Catalog # AP90720**

## Specification

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### MTCO2 Antibody - Product Information

|   |                        |
|---|------------------------|
| Application   | WB, IHC, FC, ICC, IP   |
| Primary Accession   | <a href="#">P00403</a> |
| Clonality   | Monoclonal             |
| <b>Other Names</b>  |                        |
| MT-CO2; COX2; CO2; Cytochrome c oxidase II; MTCO2; COII; COXII; |                        |

|               |            |
|---------------|------------|
| Isotype       | Rabbit IgG |
| Host          | Rabbit     |
| Calculated MW | 25565 Da   |

### MTCO2 Antibody - Additional Information

|                              |   |
|------------------------------|---|
| Dilution                     | WB~~1:1000<br>IHC~~1:100~500<br>FC~~1:10~50<br>ICC~~N/A<br>IP~~N/A  |
| Purification                 | Affinity-chromatography   |
| Immunogen                    | A synthesized peptide derived from human MTCO2  |
| Description                  | Cytochrome c oxidase is the component of the respiratory chain that catalyzes the reduction of oxygen to water. Subunits 1-3 form the functional core of the enzyme complex. Subunit 2 transfers the electrons from cytochrome c via its binuclear copper A center to the bimetallic center of the catalytic subunit 1. |
| Storage Condition and Buffer | Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.   |

### MTCO2 Antibody - Protein Information

**Name** MT-CO2

#### 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

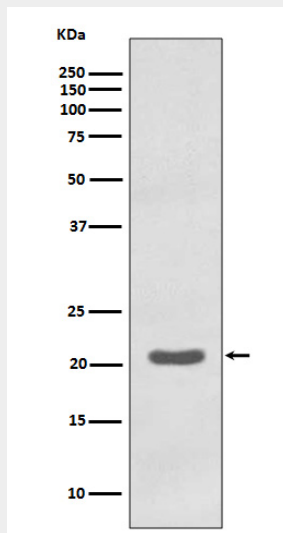
Mitochondrion inner membrane; Multi-pass membrane protein

#### MTCO2 Antibody - 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](#)

#### MTCO2 Antibody - Images



Western blot analysis of MTCO2 expression in K562 cell lysate.