

# MTCO2 Recombinant Mouse mAb

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Catalog # AP94356

## Product Information

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<b>Application</b>	WB, IHC-P, IHC-F, IF
<b>Host</b>	Rabbit
<b>Clonality</b>	Recombinant
<b>Calculated MW</b>	25 KDa
<b>Physical State</b>	Liquid
<b>Isotype</b>	IgG2a, Kappa
<b>Purity</b>	affinity purified by Protein G
<b>Buffer</b>	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
<b>SUBCELLULAR LOCATION</b>	Mitochondrion inner membrane; Multi-pass membrane protein.
<b>SIMILARITY</b>	Belongs to the cytochrome c oxidase subunit 2 family.
<b>Post-translational modifications</b>	Defects in MT-CO2 are a cause of mitochondrial complex IV deficiency (MT-C4D) [MIM:220110]; also known as cytochrome c oxidase deficiency. A disorder of the mitochondrial respiratory chain with heterogeneous clinical manifestations, ranging from isolated myopathy to severe multisystem disease affecting several tissues and organs. Features include hypertrophic cardiomyopathy, hepatomegaly and liver dysfunction, hypotonia, muscle weakness, exercise intolerance, developmental delay, delayed motor development and mental retardation. A subset of patients manifest Leigh syndrome.
<b>DISEASE</b>	Defects in MT-CO2 are a cause of mitochondrial complex IV deficiency (MT-C4D) [MIM:220110]; also known as cytochrome c oxidase deficiency. A disorder of the mitochondrial respiratory chain with heterogeneous clinical manifestations, ranging from isolated myopathy to severe multisystem disease affecting several tissues and organs. Features include hypertrophic cardiomyopathy, hepatomegaly and liver dysfunction, hypotonia, muscle weakness, exercise intolerance, developmental delay, delayed motor development and mental retardation. A subset of patients manifest Leigh syndrome.
<b>Important Note</b>	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
<b>Background Descriptions</b>	Contributes to cytochrome-c oxidase activity. Predicted to be involved in mitochondrial electron transport, cytochrome c to oxygen and positive regulation of vasoconstriction. Located in mitochondrial inner membrane. Part of respiratory chain complex IV. Biomarker of Huntington's disease and stomach cancer. [provided by Alliance of Genome Resources, Apr 2022]

## Additional Information

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<b>Dilution</b>	WB=1:500-1000,IHC-P=1:100-500,IHC-F=,IF=0
<b>Format</b>	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

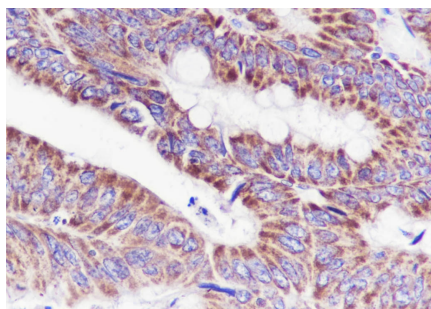
## Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

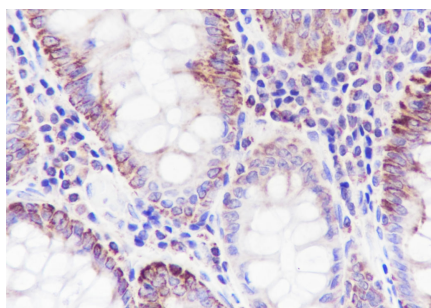
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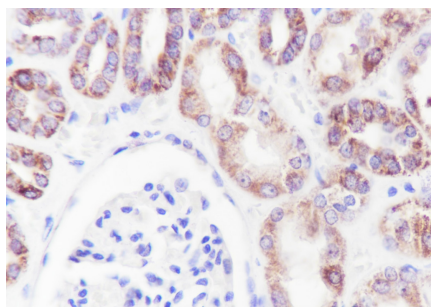
## Images



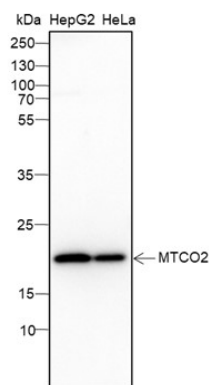
Tissue: Human colon cancer Section type: Formalin fixed & Paraffin -embedded section Retrieval method: High temperature and high pressure Retrieval buffer: Tris/EDTA buffer, pH 9.0 Primary ab dilution: 1:200 Primary ab incubation condition: 1 hour at room temperature Secondary ab: SP Kit(Mouse)(sp-0024) Counter stain: Hematoxylin (Blue) Comment: Color brown is the positive signal for AP94356



Tissue: Human colon Section type: Formalin fixed & Paraffin -embedded section Retrieval method: High temperature and high pressure Retrieval buffer: Tris/EDTA buffer, pH 9.0 Primary ab dilution: 1:200 Primary ab incubation condition: 1 hour at room temperature Secondary ab: SP Kit(Mouse)(sp-0024) Counter stain: Hematoxylin (Blue) Comment: Color brown is the positive signal for AP94356



Tissue: Human kidney Section type: Formalin fixed & Paraffin -embedded section Retrieval method: High temperature and high pressure Retrieval buffer: Tris/EDTA buffer, pH 9.0 Primary ab dilution: 1:200 Primary ab incubation condition: 1 hour at room temperature Secondary ab: SP Kit(Mouse)(sp-0024) Counter stain: Hematoxylin (Blue) Comment: Color brown is the positive signal for AP94356



Blocking buffer: 5% NFDM/TBST Primary ab dilution: 1:1000 Primary ab incubation condition: 4°C overnight Secondary ab: Goat Anti-Mouse IgG H&L (HRP) Lysate: HepG2, HeLa Protein loading quantity: 20 µg Exposure time: 180 s Predicted MW: 20 kDa Observed MW: 20 kDa