

MTCO2 Rabbit mAb

Catalog No: #48989



Package Size: #48989-1 50ul #48989-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

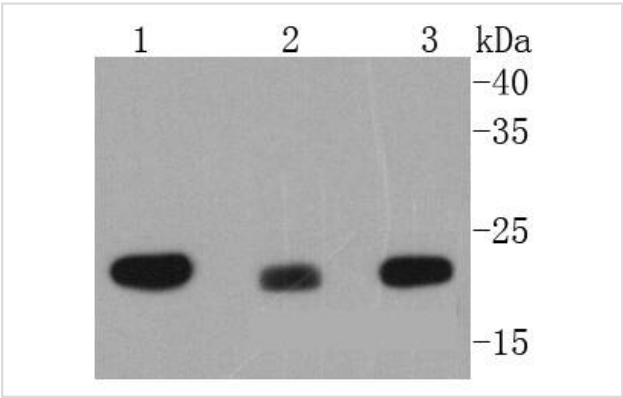
Description

Product Name	MTCO2 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	SC06-88
Purification	ProA affinity purified
Applications	WB, ICC/IF, IHC, IP, FC
Species Reactivity	Hu
Immunogen Description	recombinant protein
Other Names	COII antibody COX2 antibody COX2_HUMAN antibody COXII antibody Cytochrome c oxidase II antibody Cytochrome c oxidase polypeptide II antibody Cytochrome c oxidase subunit 2 antibody MT CO2 antibody MT-CO2 antibody MTCO2 antibody
Accession No.	Swiss-Prot#:P00403
Calculated MW	25 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

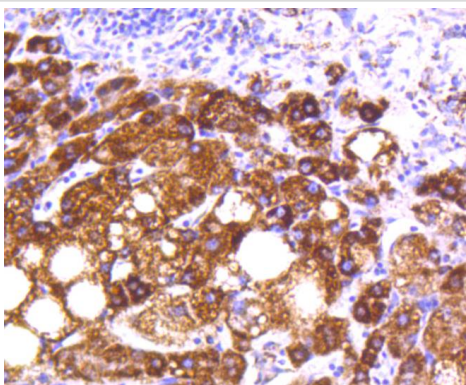
Application Details

WB: 1:1,000-1:2,000 IHC: 1:50-1:200 ICC: 1:50-1:200FC: 1:50-1:100

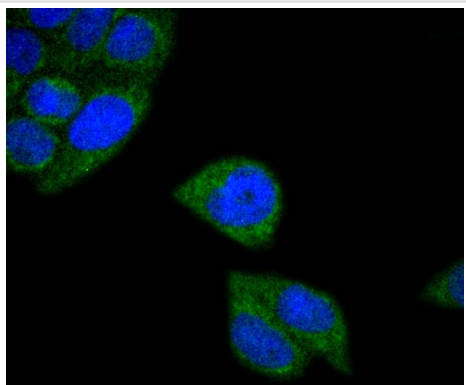
Images



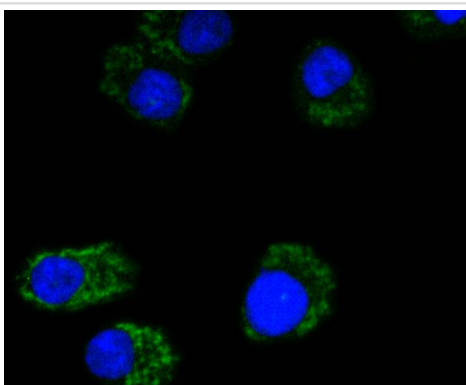
Western blot analysis of MTCO2 on different lysates using anti-MTCO2 antibody at 1/1,000 dilution. Positive control:
Lane 1: MCF-7 Lane 2: THP-1 Lane 3: Hela



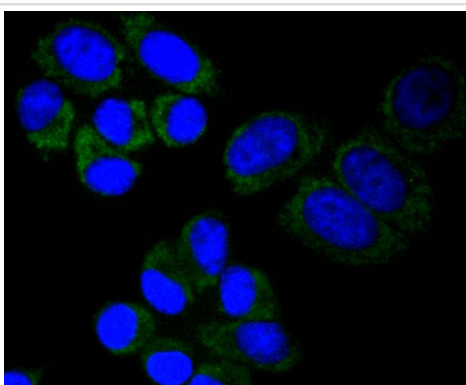
Immunohistochemical analysis of paraffin-embedded human liver tissue using anti-MTCO2 antibody. Counter stained with hematoxylin.



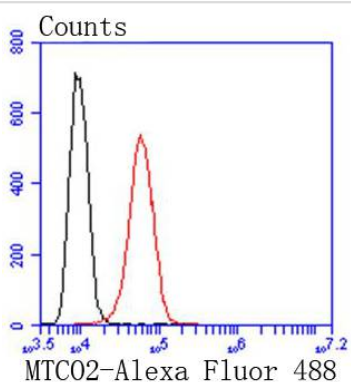
ICC staining MTCO2 in HeLa cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining MTCO2 in A549 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining MTCO2 in HepG2 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



Flow cytometric analysis of HepG2 cells with MTCO2 antibody at 1/50 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody

Background

Cytochrome c oxidase subunit II (COX2), also designated COII, MTCO2 or oxidative phosphorylation (OxPhos) complex IV, subunit II, is one of three mitochondrial DNA (mtDNA) encoded subunits (MTCO1-3) of respiratory complex IV. Cytochrome c oxidase is a hetero-oligomeric enzyme composed of 13 subunits localized to the mitochondrial inner membrane and is the terminal enzyme complex of the electron transport chain. Complex IV catalyzes the reduction of molecular oxygen to water. The energy released is used to transport protons across the mitochondrial inner membrane. The resulting electrochemical gradient is necessary for the synthesis of ATP. Complex IV contains 13 polypeptides; COX1, COX2 and COX3 (MTCO1-3) make up the catalytic core and are encoded by mtDNA while subunits IV, Va, Vb, VIa, VIb, VIc, VIIa, VIIb, VIIc and VIII are nuclear-encoded. Defects in COX2 are associated with tumor formation.

References

1. Liu KE & Frazier WA Phosphorylation of the BNIP3 C-Terminus Inhibits Mitochondrial Damage and Cell Death without Blocking Autophagy. PLoS One 10:e0129667 (2015).
2. Ng AC et al. Essential role of TID1 in maintaining mitochondrial membrane potential homogeneity and mitochondrial DNA integrity. Mol Cell Biol 34:1427-37 (2014).

Note: This product is for in vitro research use only and is not intended for use in humans or animals.