

Product datasheet for **TA378730**

COX2 Rabbit Polyclonal Antibody

Product data:

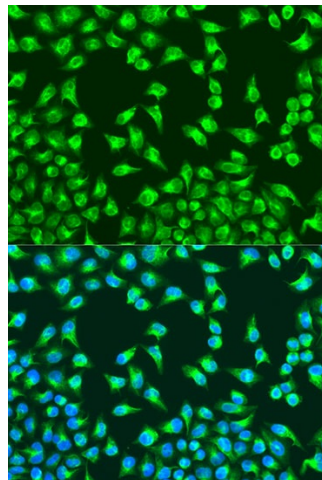
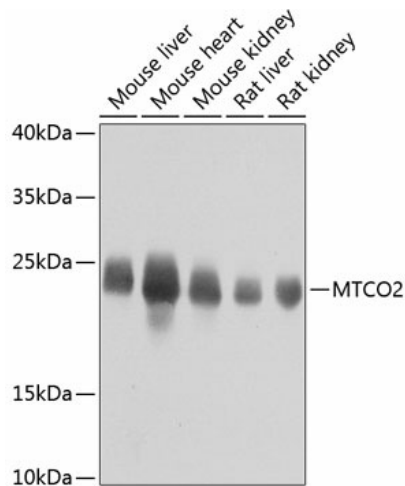
Product Type:	Primary Antibodies
Applications:	ICC/IF, IHC, WB
Recommended Dilution:	WB,1:500 - 1:2000 IHC,1:50 - 1:200 IF,1:50 - 1:200
Reactivity:	Human, Mouse, Rat
Modifications:	Unmodified
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	A synthetic peptide corresponding to a sequence within amino acids 100-200 of mouse MTCO2 (NP_904331.1).
Formulation:	Buffer: PBS with 0.02% sodium azide,50% glycerol,pH7.3.
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C. Avoid freeze / thaw cycles.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	25kDa
Gene Name:	cytochrome c oxidase II, mitochondrial
Database Link:	Entrez Gene 17709 Mouse P00403



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Background:

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.

Product images:

Immunofluorescence analysis of U2OS cells using MTCO2 antibody (TA378730) at dilution of 1:100. Blue: DAPI for nuclear staining.