

ARG43599 anti-MTCO2 antibody

Package: 100 μl Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes MTCO2
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	lgG
Target Name	MTCO2
Species	Mouse
Immunogen	Synthetic peptide corresponding to a sequence within amino acids 100-200 of mouse MTCO2 (NP_904331.1).
Conjugation	Un-conjugated
Alternate Names	COII; MTCO2; COX2; Cytochrome c oxidase subunit 2; Cytochrome c oxidase polypeptide II; MT-CO2; COX21 Publication; COXII; mitochondrially encoded cytochrome c oxidase II

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:50 - 1:200
	IHC-P	1:50 - 1:200
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	U2OS, mouse liver, rat testis	
Observed Size	24- 26 kDa	

Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Bioinformation

Gene Symbol	MT-CO2
Gene Full Name	mitochondrially encoded cytochrome c oxidase II
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. [UniProt]
Calculated Mw	25.5 kDa
Cellular Localization	Membrane, Mitochondrion, Mitochondrion inner membrane

Images



ARG43599 anti-MTCO2 antibody ICC/IF image

Immunofluorescence: U2OS cells stained with ARG43599 anti-MTCO2 antibody at 1:100 dilution.



ARG43599 anti-MTCO2 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat testis stained with ARG43599 anti-MTCO2 antibody at 1:500 dilution.



ARG43599 anti-MTCO2 antibody WB image

Western blot: 25 μg of Mouse liver tissue lysate stained with ARG43599 anti-MTCO2 antibody at 1:900 dilution.