

ARG54003 anti-COX4 antibody

Package: 100 µl, 50 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody recognizes COX4
Tested Reactivity	Hu, Ms, Rat, Goat, Hm, Mk
Tested Application	FACS, ICC/IF, IHC-P, IP, WB
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Target Name	COX4
Species	Human
Immunogen	A synthetic peptide corresponding to carboxyl terminal residues of human COX IV
Conjugation	Un-conjugated
Alternate Names	Cytochrome c oxidase polypeptide IV; COX4; COX4-1; COXIV; Cytochrome c oxidase subunit IV isoform 1; COX IV-1; Cytochrome c oxidase subunit 4 isoform 1, mitochondrial

Application Instructions

Application table	Application	Dilution
	FACS	1:100
	ICC/IF	1:150
	IHC-P	1:50
	IP	Assay-dependent
	WB	1:1000

Application Note IHC-P: Antigen Retrieval: High-pressure and temperature Citrate buffer (pH 6.0).
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

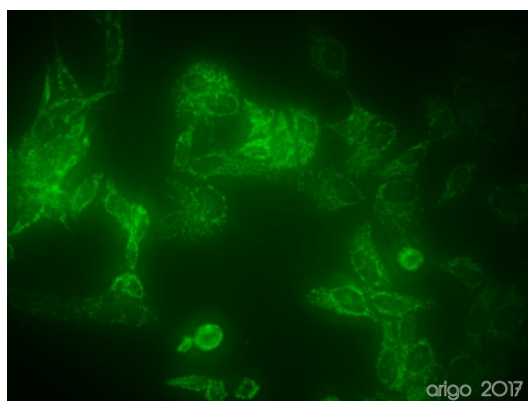
Form	Liquid
Purification	Affinity purified
Buffer	0.1M Tris-Glycine (pH 7.4), 150 mM NaCl, 0.2% Sodium azide, 0.1mg/ml BSA and 50% Glycerol
Preservative	0.2% Sodium azide
Stabilizer	0.1mg/ml BSA, 50% Glycerol
Concentration	1 mg/ml

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.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	COX4I1
Gene Full Name	cytochrome c oxidase subunit IV isoform 1
Background	Cytochrome c oxidase (COX) is the terminal enzyme of the mitochondrial respiratory chain. It is a multi-subunit enzyme complex that couples the transfer of electrons from cytochrome c to molecular oxygen and contributes to a proton electrochemical gradient across the inner mitochondrial membrane. The complex consists of 13 mitochondrial- and nuclear-encoded subunits. The mitochondrially-encoded subunits perform the electron transfer and proton pumping activities. The functions of the nuclear-encoded subunits are unknown but they may play a role in the regulation and assembly of the complex. This gene encodes the nuclear-encoded subunit IV isoform 1 of the human mitochondrial respiratory chain enzyme. It is located at the 3' of the NOC4 (neighbor of COX4) gene in a head-to-head orientation, and shares a promoter with it. Pseudogenes related to this gene are located on chromosomes 13 and 14. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jan 2016]
Function	COX4 protein is one of the nuclear-coded polypeptide chains of cytochrome c oxidase, the terminal oxidase in mitochondrial electron transport. [UniProt]
Highlight	<p>Related Antibody Duos and Panels:</p> <p>ARG30259 Loading Controls for Cytoplasmic / Nuclear Fractions Antibody Panel ARG30271 Mitochondrial Marker Antibody Panel (Cytochrome C, COX4, HSP60) ARG30276 Cytochrome-C fractionation Antibody Panel (Cytochrome-C, COX IV, beta Actin)</p> <p>Related products: COX IV antibodies; COX IV Duos / Panels; Anti-Mouse IgG secondary antibodies;</p> <p>Related poster download: The Structure & Functions of Mitochondria.pdf</p>
Research Area	Cancer antibody; Controls and Markers antibody; Metabolism antibody; Signaling Transduction antibody; Loading Control antibody for Cytoplasmic Fractions; Cytochrome-C fractionation Study antibody; Mitochondrial Marker antibody
Calculated Mw	20 kDa
Cellular Localization	Mitochondrion inner membrane. [UniProt]

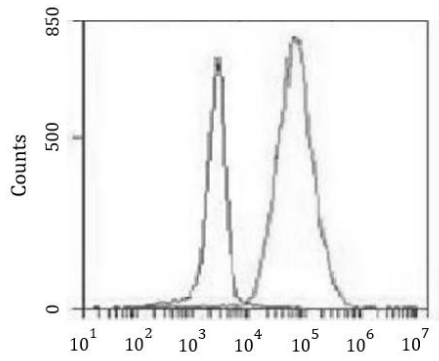
Images



ARG54003 anti-COX4 antibody ICC/IF image

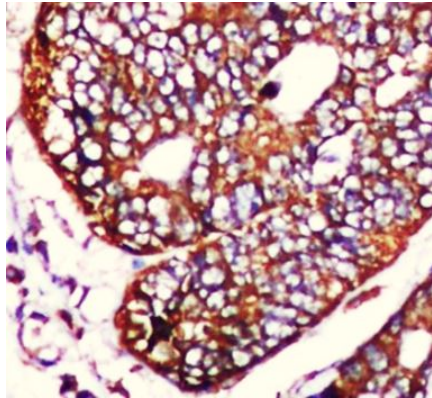
Immunofluorescence: 100% Methanol fixed (RT, 10 min) HeLa cells stained with ARG54003 anti-COX4 antibody (green) at 1:150 dilution.

Secondary antibody: [ARG55393](#) Goat anti-Mouse IgG (H+L) antibody (FITC)



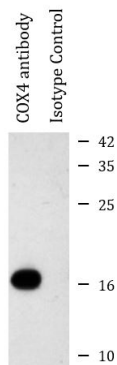
ARG54003 anti-COX4 antibody FACS image

Flow Cytometry: K562 cells stained with ARG54003 anti-COX4 antibody at 1:100 dilution (right histogram) or isotype control (left histogram), followed by incubation with FITC labelled secondary antibody.



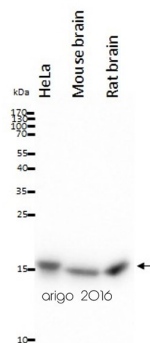
ARG54003 anti-COX4 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human colorectal carcinoma stained with ARG54003 anti-COX4 antibody at 1:50 dilution. Antigen Retrieval: High-pressure and temperature Citrate buffer (pH 6.0).



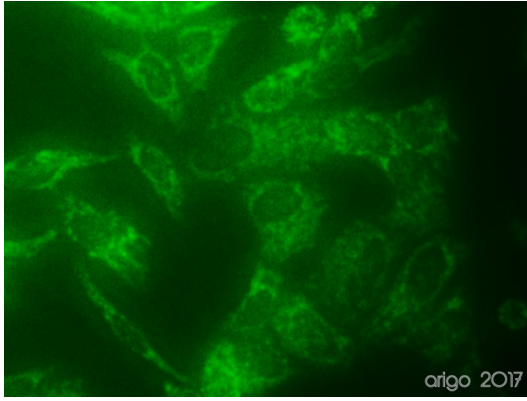
ARG54003 anti-COX4 antibody IP image

Immunoprecipitation: HeLa cell lysates were immunoprecipitated and stained with ARG54003 anti-COX4 antibody.



ARG54003 anti-COX4 antibody WB image

Western blot: 20 µg of HeLa, Mouse brain and Rat brain lysates stained with ARG54003 anti-COX4 antibody at 1:1000 dilution.



ARG54003 anti-COX4 antibody ICC/IF image

Immunofluorescence: 100% Methanol fixed (RT, 10 min) HeLa cells stained with ARG54003 anti-COX4 antibody (green) at 1:150 dilution.

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