

Product datasheet

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ARG66326 anti-COX4 antibody [SQab1874]

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

Summary

Product Description Recombinant Rabbit Monoclonal antibody [SQab1874] recognizes COX4

Tested Reactivity Hu, Ms, Rat, AGMK, Bov, Chk, Dog, Pig

Tested Application FACS, ICC/IF, IHC-P, IP, WB

Host Rabbit

Clone SQab1874

Isotype IgG

Target Name COX4

Species Human

Immunogen Synthetic peptide around the N-terminus 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	1:200 - 1:1000
	ICC/IF	1:10 - 1:50
	IHC-P	1:200 - 1:400
	IP	1:50
	WB	1:5000 - 1:10000
Application Note	IHC-P: Antigen Retrieval: Heat mediated was performed using Tris/EDTA buffer pH 9.0. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Liquid	
Purification with Protein A.	
PBS, 0.01% Sodium azide, 40% Glycerol and 0.05% BSA.	
0.01% Sodium azide	
40% Glycerol and 0.05% BSA	

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

Background

Gene Symbol COX4I1

Gene Full Name cytochrome c oxidase subunit IV isoform 1

Cytochrome c oxidase (COX) is the terminal enzyme of the mitochondrial respiratory chain. It is a multisubunit 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]

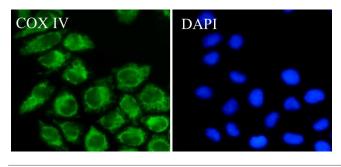
Research Area Cancer antibody; Controls and Markers antibody; Metabolism antibody; Signaling Transduction

antibody; Loading Control antibody for Cytoplasmic Fractions; Cytochrome-C fractionation Study

antibody; Mitochondrial Marker antibody

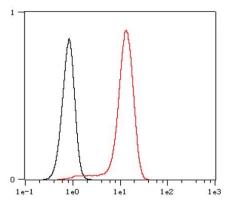
Calculated Mw 20 kDa

Images



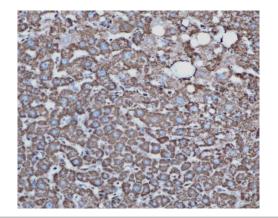
ARG66326 anti-COX4 antibody [SQab1874] ICC/IF image

Immunofluorescence: HeLa cells were fixed with 4% paraformaldehyde for 30 min at RT, permeabilized with 0.1% Triton X-100 for 10 min at RT then blocked with 10% goat serum for 30 min at RT. Cells were stained with ARG66326 anti-COX4 antibody [SQab1874] (green) at 1:50 and 4°C. DAPI (blue) was used as the nuclear counter stain.



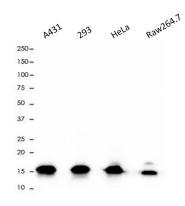
ARG66326 anti-COX4 antibody [SQab1874] FACS image

Flow Cytometry: HeLa cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% TritonX-100 for 15 min. The cells were stained with ARG66326 anti-COX4 antibody [SQab1874] (red) at 1:1,000 dilution in 1x PBS/1% BSA for 30 min at RT, followed by Alexa Fluor® 488 labelled secondary antibody. Unlabelled sample (black) was used as a control.



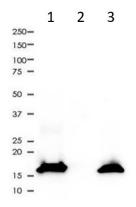
ARG66326 anti-COX4 antibody [SQab1874] IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded liver tissue stained with ARG66326 anti-COX4 antibody [SQab1874] at 1:200 dilution. Antigen Retrieval: Heat mediated was performed using Tris/EDTA buffer pH 9.0.



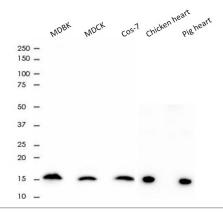
ARG66326 anti-COX4 antibody [SQab1874] WB image

Western blot: 10 μg of A431, 293, HeLa and Raw264.7 cell lysates stained with ARG66326 anti-COX4 antibody [SQab1874] at 1:5000 dilution.



ARG66326 anti-COX4 antibody [SQab1874] IP image

Immunoprecipitation: 0.4 mg of HeLa whole cell lysate immunoprecipitated (1:50) and stained with ARG66326 anti-COX4 antibody [SQab1874]. 1) ARG66326 IP in HeLa whole cell lysate, 2) PBS instead of ARG66326 in HeLa whole cell lysate, and 3) HeLa whole cell lysate, 10 μ g (input).



ARG66326 anti-COX4 antibody [SQab1874] WB image

Western blot: 10 μg of MDBK, MDCK, Cos-7, Chicken heart and Pig heart lysates stained with ARG66326 anti-COX4 antibody [SQab1874] at 1:5000 dilution.

Mouse heart Mouse liver Rat kidney Rat liver



ARG66326 anti-COX4 antibody [SQab1874] WB image

Western blot: 2 μg of Mouse heart, Mouse kidney, Mouse liver, Rat heart, Rat kidney and Rat liver lysates stained with ARG66326 anti-COX4 antibody [SQab1874] at 1:5000 dilution.