

## 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
Clonality	Monoclonal
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

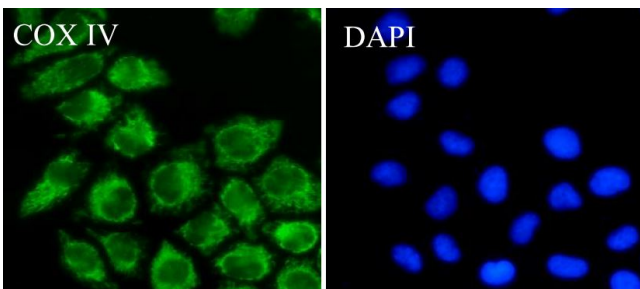
Form	Liquid
Purification	Purification with Protein A.
Buffer	PBS, 0.01% Sodium azide, 40% Glycerol and 0.05% BSA.
Preservative	0.01% Sodium azide
Stabilizer	40% Glycerol and 0.05% BSA

<b>Storage instruction</b>	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.
<b>Note</b>	For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

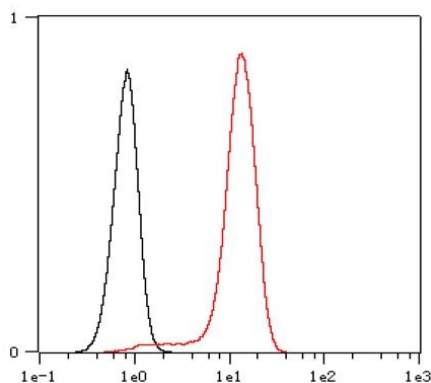
<b>Gene Symbol</b>	COX4I1
<b>Gene Full Name</b>	cytochrome c oxidase subunit IV isoform 1
<b>Background</b>	Cytochrome c oxidase (COX) is the terminal enzyme of the mitochondrial respiratory chain. It is a multi-subunit enzyme complex that couples the transfer of electrons from cytochrome c to molecular 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]
<b>Function</b>	COX4 protein is one of the nuclear-coded polypeptide chains of cytochrome c oxidase, the terminal oxidase in mitochondrial electron transport. [UniProt]
<b>Research Area</b>	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
<b>Calculated Mw</b>	20 kDa

## Images



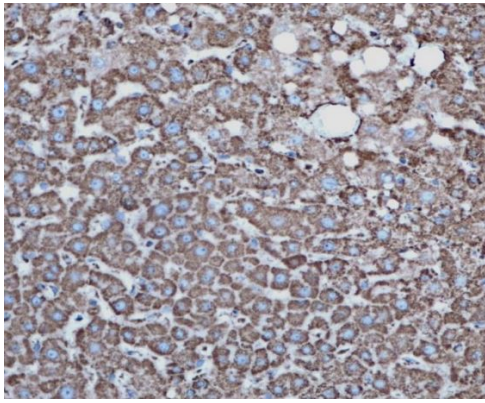
ARG66326 anti-COX4 antibody [SQab1874] ICC/IF image

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.



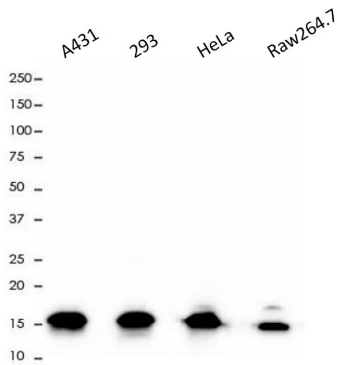
ARG66326 anti-COX4 antibody [SQab1874] FACS image

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.



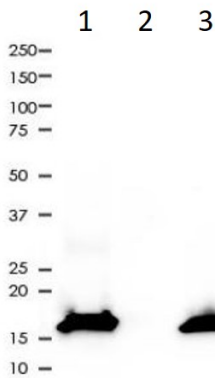
#### ARG66326 anti-COX4 antibody [SQab1874] IHC-P image

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.



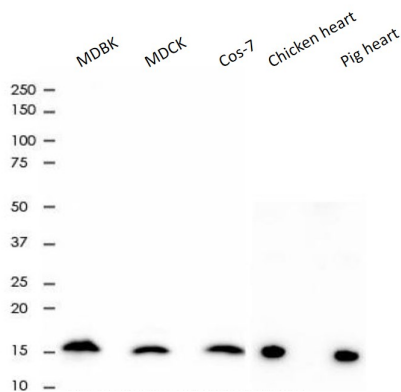
#### ARG66326 anti-COX4 antibody [SQab1874] WB image

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



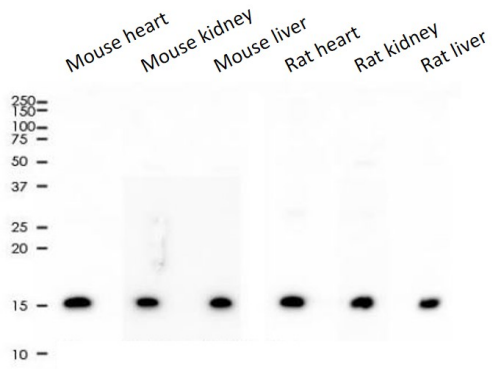
#### ARG66326 anti-COX4 antibody [SQab1874] IP image

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 µg (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.



#### ARG66326 anti-COX4 antibody [SQab1874] WB image

Western blot: 2  $\mu$ g 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.