

Rabbit COX42 Polyclonal Antibody | anti-COX4I2 antibody

COX42 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA286966	Rabbit	Human, mouse, rat	Immunofluorescence, Western Blot

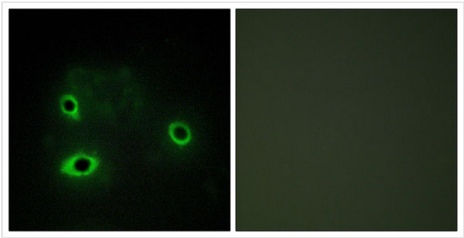
PRODUCT SYNONYMS

COX42; Polyclonal Antibody; COX42 Antibody; Cytochrome c oxidase subunit 4 isoform 2; mitochondrial; Cytochrome c oxidase subunit IV isoform 2; COX IV-2; COX4I2; COX4L2; anti-COX4I2 antibody

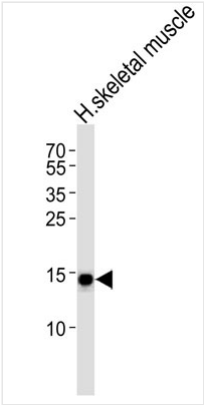
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, mouse, rat
Clonality	Polyclonal
Purity/Purification	Purified Rabbit Polyclonal Antibody (Pab)
Form/Format	Rabbit IgG in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.
Sequence Positions	55-80
Sequence Length	171
Applicable Applications for anti-COX4I2 antibody	IF (Immunofluorescence), WB (Western Blot)
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.
Cellular Location	Mitochondrion inner membrane {ECO:0000250 UniProtKB:P00423}; Single-pass membrane protein {ECO:0000250 UniProtKB:P00423}
Tissue Location	Highly expressed in lung.
Preparation and Storage	Store at -20°C

IMAGES



IF (Immunofluorescence)
Immunofluorescence analysis of COS7 cells, using COX42 antibody.



WB (Western Blot)
Western blot analysis of lysate from human skeletal muscle tissue lysate, using COX42 Antibody(AAA286966). AAA286966 was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug.

ADDITIONAL INFORMATION

Related Product Information for anti-COX4I2 antibody	This protein is one of the nuclear-coded polypeptide chains of cytochrome c oxidase, the terminal oxidase in mitochondrial electron transport.
Product Categories/Family for anti-COX4I2 antibody	Cancer; Metabolism; Signal Transduction
References	Huettemann M.,et al.Gene 267:111-123(2001). Deloukas P.,et al.Nature 414:865-871(2001). Shteyer E.,et al.Am. J. Hum. Genet. 84:412-417(2009).

NCBI AND UNIPROT INFORMATION

NCBI GI #	17999526
NCBI GeneID	84701
NCBI Accession #	NP_115998.2
NCBI GenBank Nucleotide #	NM_032609.2
UniProt Accession #	Q96KJ9; Q6GTF4; Q9H0Z4
Molecular Weight	20 kDa
NCBI Official Full Name	cytochrome c oxidase subunit 4 isoform 2, mitochondrial
NCBI Official Synonym Full Names	cytochrome c oxidase subunit IV isoform 2 (lung)
NCBI Official Symbol	COX4I2
NCBI Official Synonym Symbols	COX4; COX4B; COX4-2; COX4L2; COXIV-2; dJ857M17.2
NCBI Protein Information	cytochrome c oxidase subunit 4 isoform 2, mitochondrial
UniProt Protein Name	Cytochrome c oxidase subunit 4 isoform 2, mitochondrial
UniProt Gene Name	COX4I2
UniProt Synonym Gene Names	COX4L2; COX IV-2
UniProt Entry Name	COX42_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/cox42-antibody-immunofluorescence-western-blot-elisa/286966>