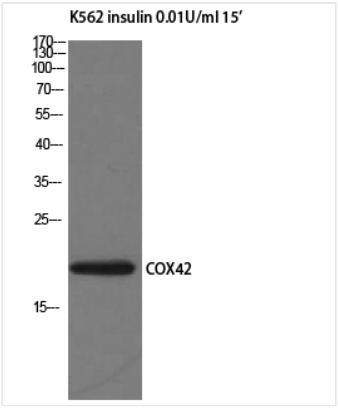
# COX4I2 Antibody – Rabbit Polyclonal

## PRODUCT OVERVIEW

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| **Product Name** | COX4I2, Polyclonal Antibody |
| **Full Product Name** | COX4I2 Polyclonal Antibody |
| **Product Gene Name** | anti-COX4I2 antibody |
| **Product Synonym Names** | COX4I2; COX4L2; Cytochrome c oxidase subunit 4 isoform 2; mitochondrial; Cytochrome c oxidase subunit IV isoform 2; COX IV-2 |
| **Clonality** | Polyclonal |
| **Host** | Rabbit |
| **Species Reactivity** | Human, Mouse, Rat |
| **Preparation and Storage** | Maintain refrigerated at 2-8 degree C for up to 2 weeks. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles. |
| **Molecular Weight** | 20,010 Da |
| **Chromosome Location** | Chromosome: 20; NC_000020.10 (30225691..30232800). Location: 20q11.21 |
| **OMIM** | 607976 |
| **3D Structure** | ModBase 3D Structure for Q96KJ9 |
| **Applications Tested/Suitable for anti-COX4I2 antibody** | Western Blot (WB), Immunohistochemistry-Paraffin (IHC-P), Immunofluorescence (IF) |
| **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. |
| **Other Notes** | Small volumes of anti-COX4I2 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply. |
| **Searchable Terms for COX4I2 purchase** | MBS9243208 is an antibody targeting COX4I2. Also known as COX4I2 Polyclonal Antibody. Reactive in Human, Mouse, Rat. Host: Rabbit. |




**Wester Blot (WB) of anti-COX4I2 antibody**
Dilution: Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300.
Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.

## ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for COX4I2. It may not necessarily be applicable to this product.

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| **NCBI GI #** | 17999526 |
| **NCBI GeneID** | 84701 |
| **NCBI Accession #** | NP_115998.2 |
| **UniProt Primary Accession #** | Q96KJ9 |
| **UniProt Secondary Accession #** | Q6GTF4; Q9H0Z4 |
| **UniProt Related Accession #** | Q96KJ9 |
| **GenBank Nucleotide #** | NM_032609.2 |
| **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 |
| **UniProt Protein Name** | Cytochrome c oxidase subunit 4 isoform 2, mitochondrial |
| **UniProt Synonym Protein Names** | Cytochrome c oxidase subunit IV isoform 2 |
| **UniProt Gene Name** | COX4I2 |
| **UniProt Synonym Gene Names** | COX4L2; COX IV-2 |
| **UniProt Entry Name** | COX42_HUMAN |
| **NCBI Protein Information** | cytochrome c oxidase subunit 4 isoform 2, mitochondrial; COX IV-2; cytochrome c oxidase subunit IV-like 2 |
| **NCBI Summary for COX4I2** | Cytochrome c oxidase (COX), the terminal enzyme of the mitochondrial respiratory chain, catalyzes the electron transfer from reduced cytochrome c to oxygen. It is a heteromeric complex consisting of 3 catalytic subunits encoded by mitochondrial genes and multiple structural subunits encoded by nuclear genes. The mitochondrially-encoded subunits function in electron transfer, and the nuclear-encoded subunits may be involved in the regulation and assembly of the complex. This nuclear gene encodes isoform 2 of subunit IV. Isoform 1 of subunit IV is encoded by a different gene, however, the two genes show a similar structural organization. Subunit IV is the largest nuclear encoded subunit which plays a pivotal role in COX regulation. [provided by RefSeq, Jul 2008] |
| **UniProt Comments for COX4I2** | COX4I2: This protein is one of the nuclear-coded polypeptide chains of cytochrome c oxidase, the terminal oxidase in mitochondrial electron transport. Defects in COX4I2 are the cause of exocrine pancreatic insufficiency dyserythropoietic anemia and calvarial hyperostosis (EPIDACH). Patients present with pancreatic insufficiency, intestinal malabsorption, failure to thrive, and anemia soon after birth. Belongs to the cytochrome c oxidase IV family.<br><br>Protein type: Oxidoreductase; Mitochondrial<br><br>Chromosomal Location of Human Ortholog: 20q11.21<br><br>Cellular Component: mitochondrial respiratory chain complex IV<br><br>Molecular Function: cytochrome-c oxidase activity<br><br>Biological Process: generation of precursor metabolites and energy; cellular respiration<br><br>Disease: Exocrine Pancreatic Insufficiency, Dyserythropoietic Anemia, And Calvarial Hyperostosis |
| **Research Articles on COX4I2** | **1.** Identification of three transcription factors that bind a conserved responsive element of the COX4I2 gene, namely recombination signal sequence-binding protein Jkappa (RBPJ), coiled-coil-helix-coiled-coil-helix domain 2 (CHCHD2) and CXXC finger protein 5 (CXXC5). |

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