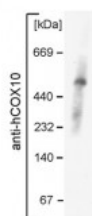


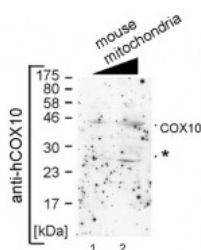


## COX10 Antibody

CATALOG NUMBER: 26-032



Antibody used in WB on mouse mitochondria at 1:1000.



Antibody used in WB on mouse mitochondria at 1:1000.



Antibody used in WB on Human Lung at 0.2-1 ug/ml.

### Specifications

|                                    |                                                                                                                                                                                                                                   |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>SPECIES REACTIVITY:</b>         | Human, Mouse, Rat                                                                                                                                                                                                                 |
| <b>TESTED APPLICATIONS:</b>        | ELISA, WB                                                                                                                                                                                                                         |
| <b>APPLICATIONS:</b>               | COX10 antibody can be used for detection of COX10 by ELISA at 1:312500. COX10 antibody can be used for detection of COX10 by western blot at 1 ug/mL, and HRP conjugated secondary antibody should be diluted 1:50,000 - 100,000. |
| <b>USER NOTE:</b>                  | Optimal dilutions for each application to be determined by the researcher.                                                                                                                                                        |
| <b>POSITIVE CONTROL:</b>           | 1) Cat. No. XBL-10410 - Fetal Lung Tissue Lysate                                                                                                                                                                                  |
| <b>PREDICTED MOLECULAR WEIGHT:</b> | 49 kDa                                                                                                                                                                                                                            |
| <b>IMMUNOGEN:</b>                  | Antibody produced in rabbits immunized with a synthetic peptide corresponding a region of human COX10.                                                                                                                            |
| <b>HOST SPECIES:</b>               | Rabbit                                                                                                                                                                                                                            |

### Properties

|                            |                                                                                                                                                                       |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>PURIFICATION:</b>       | Antibody is purified by peptide affinity chromatography method.                                                                                                       |
| <b>PHYSICAL STATE:</b>     | Lyophilized                                                                                                                                                           |
| <b>BUFFER:</b>             | Antibody is lyophilized in PBS buffer with 2% sucrose. Add 50 uL of distilled water. Final antibody concentration is 1 mg/mL.                                         |
| <b>CONCENTRATION:</b>      | 1 mg/ml                                                                                                                                                               |
| <b>STORAGE CONDITIONS:</b> | For short periods of storage (days) store at 4°C. For longer periods of storage, store COX10 antibody at -20°C. As with any antibody avoid repeat freeze-thaw cycles. |
| <b>CLONALITY:</b>          | Polyclonal                                                                                                                                                            |
| <b>CONJUGATE:</b>          | Unconjugated                                                                                                                                                          |

### Additional Info

|                         |           |
|-------------------------|-----------|
| <b>ALTERNATE NAMES:</b> | COX10,    |
| <b>ACCESSION NO.:</b>   | NP_001294 |
| <b>PROTEIN GI NO.:</b>  | 17921982  |

OFFICIAL SYMBOL: COX10

GENE ID: 1352

## Background

**BACKGROUND:** Cytochrome c oxidase (COX), the terminal component of the mitochondrial respiratory chain, catalyzes the electron transfer from reduced cytochrome c to oxygen. COX10 is heme A: farnesyltransferase, which is not a structural subunit but required for the expression of functional COX and functions in the maturation of the heme A prosthetic group of COX. This protein is predicted to contain 7-9 transmembrane domains localized in the mitochondrial inner membrane. A gene mutation, which results in the substitution of a lysine for an asparagine (N204K), is identified to be responsible for cytochrome c oxidase deficiency. In addition, this gene is disrupted in patients with CMT1A (Charcot-Marie-Tooth type 1A) duplication and with HNPP (hereditary neuropathy with liability to pressure palsies) deletion. Cytochrome c oxidase (COX), the terminal component of the mitochondrial respiratory chain, catalyzes the electron transfer from reduced cytochrome c to oxygen. This component 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 function in the regulation and assembly of the complex. This nuclear gene encodes heme A:farnesyltransferase, which is not a structural subunit but required for the expression of functional COX and functions in the maturation of the heme A prosthetic group of COX. This protein is predicted to contain 7-9 transmembrane domains localized in the mitochondrial inner membrane. A gene mutation, which results in the substitution of a lysine for an asparagine (N204K), is identified to be responsible for cytochrome c oxidase deficiency. In addition, this gene is disrupted in patients with CMT1A (Charcot-Marie-Tooth type 1A) duplication and with HNPP (hereditary neuropathy with liability to pressure palsies) deletion. Publication Note: This RefSeq record includes a subset of the publications that are available for this gene. Please see the Entrez Gene record to access additional publications.

**REFERENCES:** 1) Veluthakal, R., (2007) Diabetes 56 (1), 204-210.

FOR RESEARCH USE ONLY

December 12, 2016