

COX4I2 Polyclonal Antibody

Catalog No: YT1075

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: COX4I2

Fields: >>Oxidative phosphorylation;>>Metabolic pathways;>>Cardiac muscle

contraction;>>Thermogenesis;>>Non-alcoholic fatty liver disease;>>Alzheimer disease;>>Parkinson disease;>>Amyotrophic lateral sclerosis;>>Huntington disease;>>Prion disease;>>Pathways of neurodegeneration - multiple diseases;>>Chemical carcinogenesis - reactive oxygen species;>>Diabetic

cardiomyopathy

Q96KJ9

Q91W29

Gene Name: COX4I2

Protein Name: Cytochrome c oxidase subunit 4 isoform 2 mitochondrial

Human Gene Id: 84701

Human Swiss Prot

No:

Mouse Gene Id: 84682

Mouse Swiss Prot

No:

Rat Gene Id: 84683

Rat Swiss Prot No: Q91Y94

Immunogen: The antiserum was produced against synthesized peptide derived from human

COX42. AA range:31-80

Specificity: COX4I2 Polyclonal Antibody detects endogenous levels of COX4I2 protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.



Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:10000. Not

yet tested in other applications.

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 20kD

Cell Pathway: Oxidative phosphorylation; Cardiac muscle contraction; Alzheimer's

disease;Parkinson's disease;Huntington's disease;

Background: 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],

Function: function: This protein is one of the nuclear-coded polypeptide chains of

cytochrome c oxidase, the terminal oxidase in mitochondrial electron transport., similarity: Belongs to the cytochrome c oxidase IV family., tissue

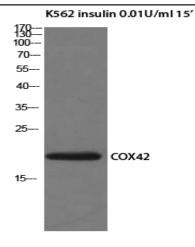
specificity: Highly expressed in lung.,

Subcellular Location:

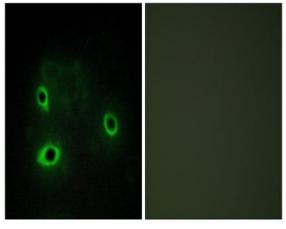
Mitochondrion inner membrane ; Single-pass membrane protein .

Expression: Highly expressed in lung.

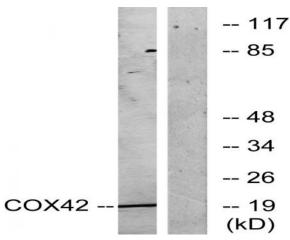
Products Images



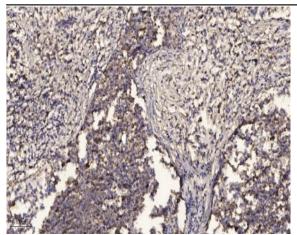
Western Blot analysis of K562 insulin 0.01U/ml 15' cells using COX4I2 Polyclonal Antibody



Immunofluorescence analysis of COS7 cells, using COX42 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from K562 cells, treated with insulin 0.01U/ml 15', using COX42 Antibody. The lane on the right is blocked with the synthesized peptide.



Immunohistochemical analysis of paraffin-embedded human Squamous cell carcinoma of lung. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).