

COX4 Polyclonal Antibody

Catalog No: YT1074

Reactivity: Human; Rat; Mouse;

Applications: WB;IHC;IF;ELISA

Target: COX IV

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

P13073

P19783

Gene Name: COX4I1

Protein Name: Cytochrome c oxidase subunit 4 isoform 1 mitochondrial

Human Gene ld: 1327

Human Swiss Prot

No:

Mouse Swiss Prot

No:

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Immunogen: The antiserum was produced against synthesized peptide derived from human COX41. AA range:11-60

Specificity: COX4 Polyclonal Antibody detects endogenous levels of COX4 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: 1:20000. 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: 17kD

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

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

Background : 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

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: Ubiquitous.,

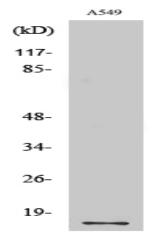
Subcellular Location:

Mitochondrion inner membrane; Single-pass membrane protein.

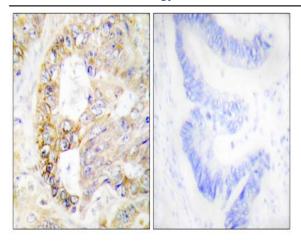
Expression:

Ubiquitous.

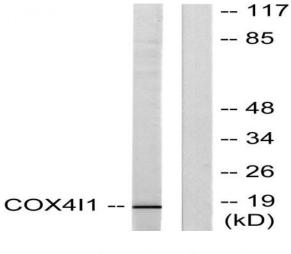
Products Images



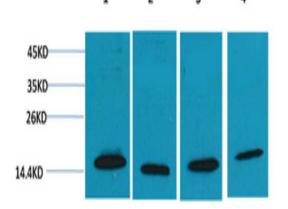
Western Blot analysis of various cells using COX4 Polyclonal Antibody



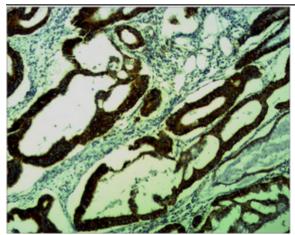
Immunohistochemistry analysis of paraffin-embedded human colon carcinoma tissue, using COX41 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from A549 cells, using COX41 Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of 1) Hela, 2) 3T3, 3) Mouse Brain, 4) Rat Brain using COX4 Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded human Colon caricnoma using COX4 Polyclonal Antibody.