

## **COX4I2 Monoclonal Antibody**

Catalog No: YM1023

Reactivity: Human

**Applications:** WB;FCM;IF

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

Gene Name: COX4I2

**Protein Name:** Cytochrome c oxidase subunit 4 isoform 2 mitochondrial

Human Gene Id: 84701

**Human Swiss Prot** 

No:

**Mouse Swiss Prot** 

No:

Immunogen: Purified recombinant human COX4I2 (C-terminus) protein fragments expressed

in E.coli.

Q96KJ9

Q91W29

**Specificity:** COX4I2 Monoclonal Antibody detects endogenous levels of COX4I2 protein.

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

**Source:** Monoclonal, Mouse

**Dilution:** WB 1:1000 - 1:2000. Flow cytometry: 1:100 - 1:200. IF 1:100 - 1:500. Not yet

tested in other applications.

**Purification:** Affinity purification

1/3



**Concentration**: 1 mg/ml

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

Molecularweight: 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.

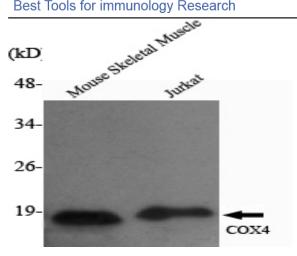
**Sort :** 4486

No4:

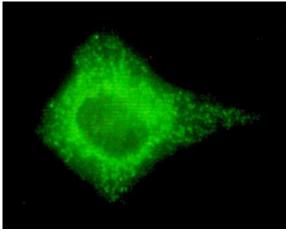
Host: Mouse

Modifications: Unmodified

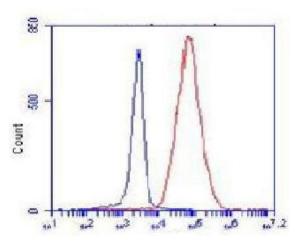
## **Products Images**



Western Blot analysis using COX4I2 Monoclonal Antibody against mouse skeletal muscel, Jurkat cell lysate.



Immunofluorescence analysis of HeLa cells using COX4I2 Monoclonal Antibody.



Flow cytometric analysis of K562 cells stained with COX4I2 Monoclonal Antibody (red), followed by FITC-conjugated goat anti-mouse IgG. Blue line histogram represents the isotype control, normal mouse IgG.