

## **COX IV mouse mAb**

Catalog No: YM1222

**Reactivity:** Human; Mouse; Rat; Hamster; Goat; Monkey

**Applications:** WB;FC;ICC;IP;IHC

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

A synthetic peptide corresponding to carboxyl terminal residues of human COX

cardiomyopathy

Gene Name: cox iv

Human Gene Id: 1327

**Human Swiss Prot** 

No:

**Mouse Swiss Prot** 

Immunogen:

No:

IV

P13073

P19783

**Specificity:** This antibody detects endogenous levels of COX IV and does not cross-react

with related proteins.

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

**Source:** Monoclonal, Mouse

**Dilution:** wb 1:1000 icc 1:150 fcm 1:100

**Purification:** The antibody was affinity-purified from mouse ascites by affinity-

chromatography using epitope-specific immunogen.

1 mg/ml



**Storaget 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

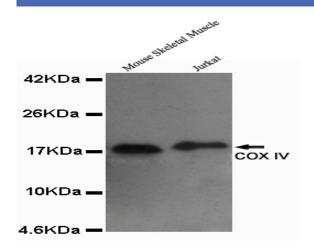
specificity: Ubiquitous.,

Subcellular Location:

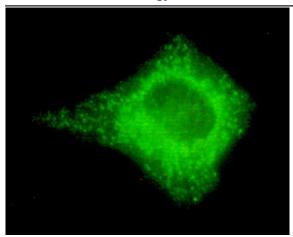
Mitochondrion inner membrane; Single-pass membrane protein.

**Expression:** Ubiquitous.

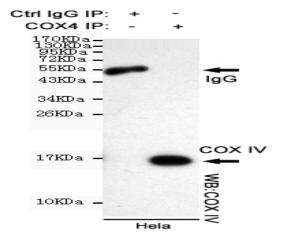
## **Products Images**



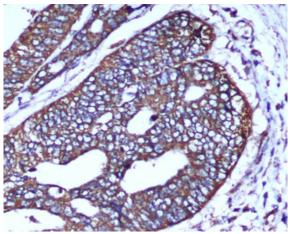
Western blot detection of COX IV in Mouse skeletal muscel and Jurkat lysates using COX IV mouse mAb (1:1000 diluted). Predicted band size: 17KDa.Observed band size: 17KDa.



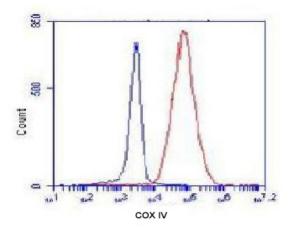
Immunocytochemistry of HeLa cells using anti-COX IV mouse mAb diluted 1:150.



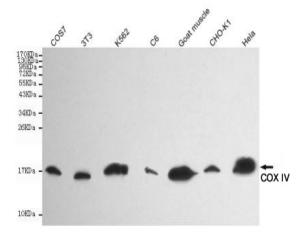
Immunoprecipitation analysis of Hela cell lysates using COX IV mouse mAb.



Immunohistochemical analysis of paraffin-embedded human colorectal carcinoma with COX IV Mouse mAb (4D11-B3-E8,1:50 diluted), showing cytoplasm localization. A high pressure mediated antigen retrieval step was performed in citrate buffer (pH6.0).



Flow Cytometry analysis of K562 cells stained with COX4 (red, 1/100 dilution), followed by FITC-conjugated goat anti-mouse IgG. Blue line histogram represents the isotype control, normal mouse IgG.



Western blot detection of COX IV in Goat muscle, CHO-k1, COS7, 3T3, Hela, C6 and K562 cell lysates using COX IV mouse mAb (1:5000 diluted). Predicted band size: 17KDa. Observed band size: 17KDa.