

## COX IV mouse mAb

<b>Catalog No :</b>	YM1222
<b>Reactivity :</b>	Human;Mouse;Rat;Hamster;Goat;Monkey
<b>Applications :</b>	WB;FC;ICC;IP;IHC
<b>Target :</b>	COX IV
<b>Fields :</b>	>>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
<b>Gene Name :</b>	cox iv
<b>Human Gene Id :</b>	1327
<b>Human Swiss Prot No :</b>	P13073
<b>Mouse Swiss Prot No :</b>	P19783
<b>Immunogen :</b>	A synthetic peptide corresponding to carboxyl terminal residues of human COX IV
<b>Specificity :</b>	This antibody detects endogenous levels of COX IV and does not cross-react with related proteins.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Monoclonal, Mouse
<b>Dilution :</b>	wb 1:1000 icc 1:150 fcm 1:100
<b>Purification :</b>	The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.  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;

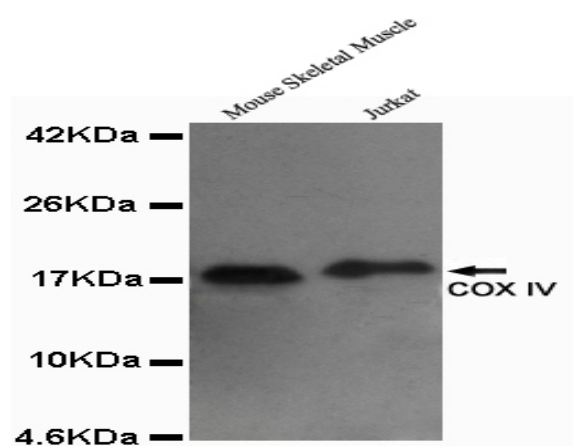
**Background :** Cytochrome c oxidase (COX) is the terminal enzyme of the mitochondrial respiratory chain. It is a multi-subunit enzyme complex that couples the transfer of electrons from cytochrome c to molecular oxygen and contributes to a proton electrochemical gradient across the inner mitochondrial 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.,

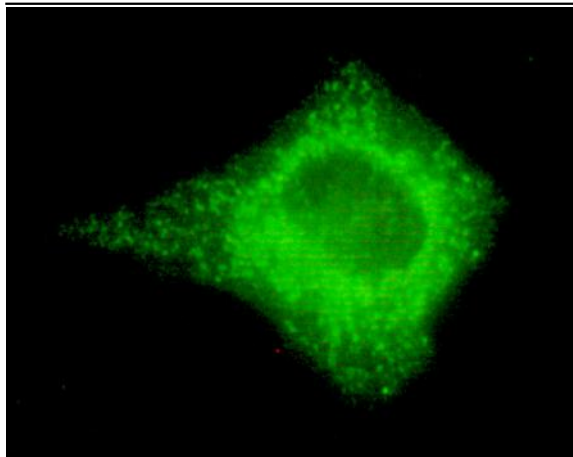
**Subcellular Location :** Mitochondrion inner membrane ; Single-pass membrane protein .

**Expression :** Ubiquitous.

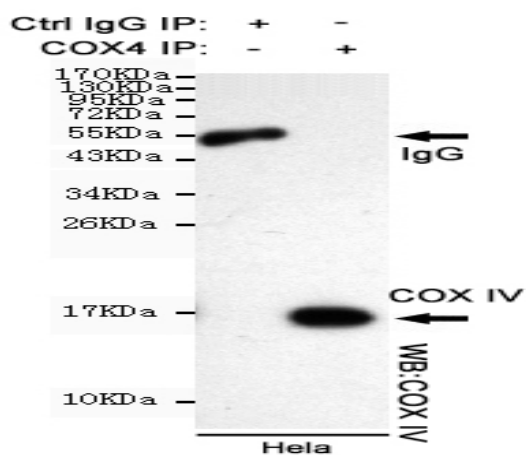
## Products Images



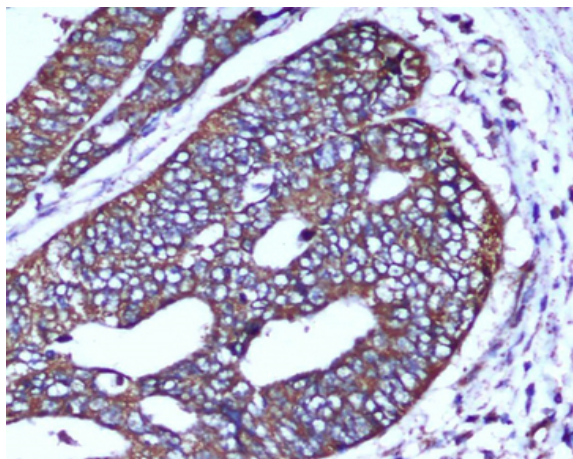
Western blot detection of COX IV in Mouse skeletal muscle and Jurkat lysates using COX IV mouse mAb (1:1000 diluted). Predicted band size: 17KDa. Observed band size: 17KDa.



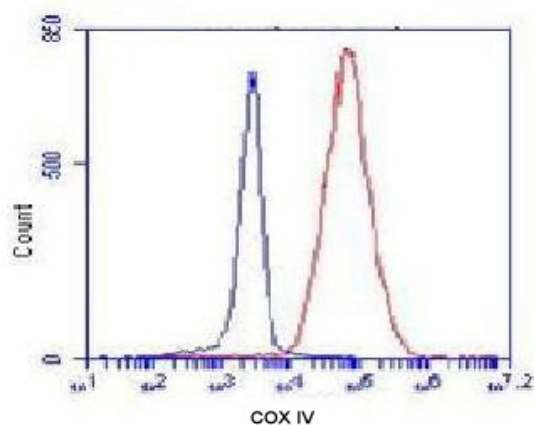
Immunocytochemistry of HeLa cells using anti-COX IV mouse mAb diluted 1:150.



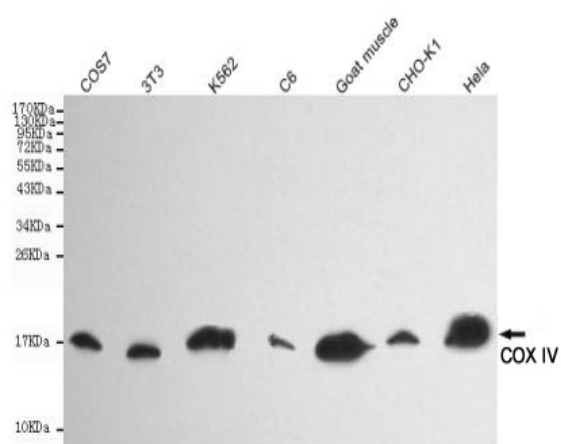
Immunoprecipitation analysis of Hela cell lysates using COX IV mouse mAb.



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 (pH 6.0).



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.