

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 cardiomyopathy
Gene Name :	cox iv
Human Gene Id :	1327
Human Swiss Prot No :	P13073
Mouse Swiss Prot No :	P19783
Immunogen :	A synthetic peptide corresponding to carboxyl terminal residues of human COX IV
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

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;

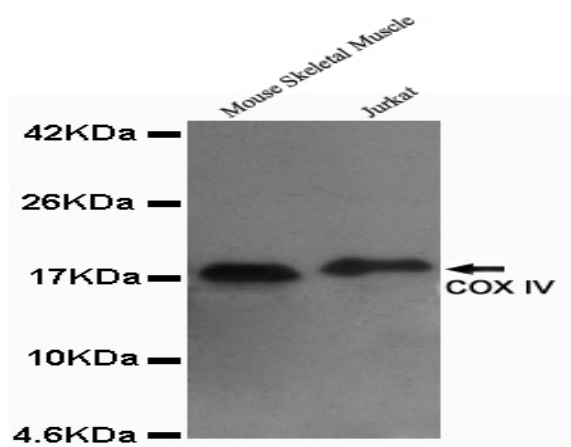
Background : Cytochrome c oxidase (COX) is the terminal enzyme of the mitochondrial respiratory chain. It is a multi-subunit enzyme complex that couples the transfer of electrons from cytochrome c to molecular oxygen and contributes to a proton electrochemical gradient across the inner mitochondrial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

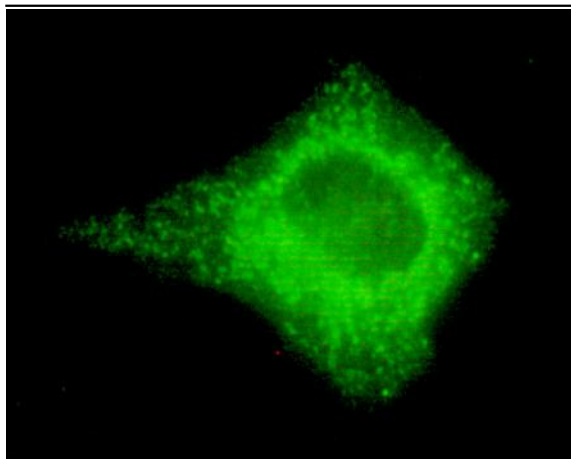
Subcellular Location : Mitochondrion inner membrane ; Single-pass membrane protein .

Expression : Ubiquitous.

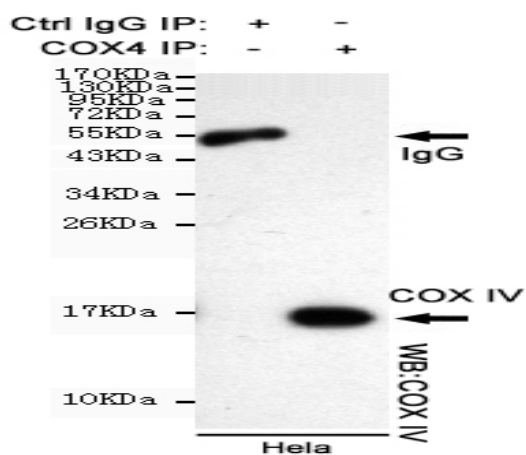
Products Images



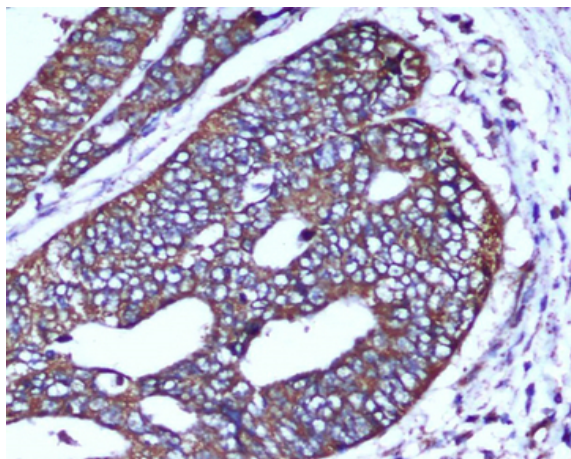
Western blot detection of COX IV in Mouse skeletal muscle and Jurkat lysates using COX IV mouse mAb (1:1000 diluted). Predicted band size: 17KDa. Observed band size: 17KDa.



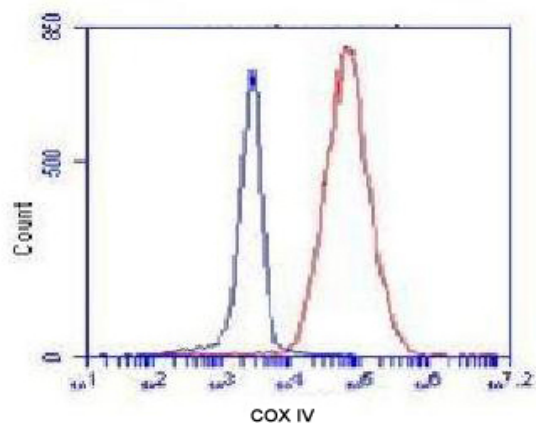
Immunocytochemistry of HeLa cells using anti-COX IV mouse mAb diluted 1:150.



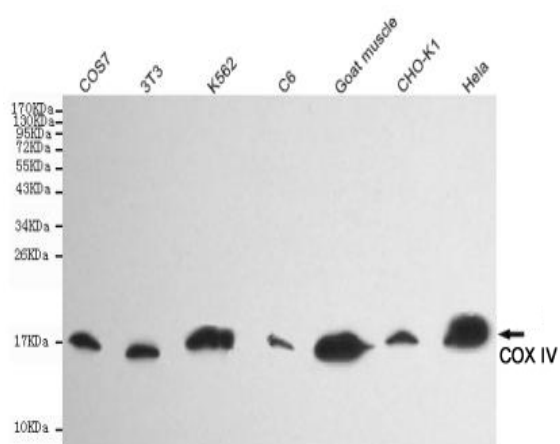
Immunoprecipitation analysis of Hela cell lysates using COX IV mouse mAb.



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.