

## OriGene Technologies, Inc.

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## **Product datasheet for TA346921**

## COX4 (COX4I1) Mouse Monoclonal Antibody [Clone ID: 4D11-B3-E8]

**Product data:** 

**Product Type:** Primary Antibodies

Clone Name: 4D11-B3-E8

**Applications:** FC, IF, IHC, IP, WB

**Recommend Dilution:** WB: 1:1000, IF: 1:150, FC: 1:100

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

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: The immunogen for COX IV antibody: A synthetic peptide corresponding to carboxyl terminal

residues of human COX IV

**Formulation:** Purified mouse monoclonal antibody in buffer containing 0.1M Tris-Glycine(pH 7.4,150 mM

NaCl)with 0.02% sodium azide, 0.1 mg/mlBSA and 50% glycerol.

**Purification:** Affinity purified

Predicted Protein Size: 17 kDa

**Gene Name:** cytochrome c oxidase subunit 4l1

Database Link: NP 001852 Entrez Gene 12857 MouseEntrez Gene 29445 RatEntrez Gene 1327 Human

**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. [provided by RefSeq,Jul 2008]

Synonyms: COX4; COX4-1; COXIV; COX IV-1; COXIV-1

**Protein Families:** Transmembrane

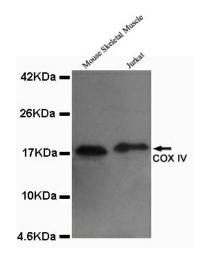




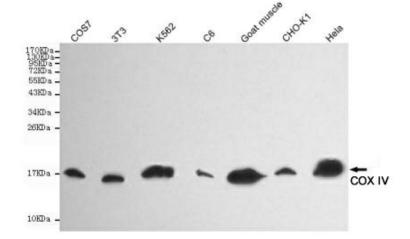
**Protein Pathways:** 

Alzheimer's disease, Cardiac muscle contraction, Huntington's disease, Metabolic pathways, Oxidative phosphorylation, Parkinson's disease

## **Product images:**

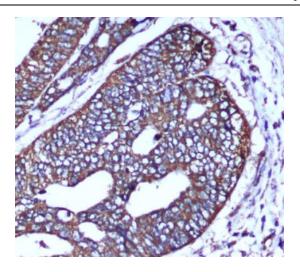


Western blot detection of COX IV in Mouse skeletal muscel and Jurkat lysates using COX IV mouse mAb (1:1000 diluted). Predicted band size: 17KDa.Observed band size: 17KDa.

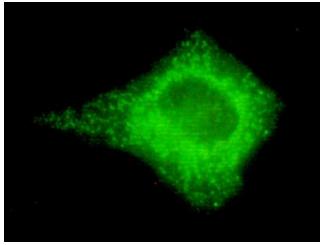


Western blot detection of COX IV in Goat muscle, CHO-k1, COS7, 3T3, Hela, C6 and K562 cell lysates using COX IV mouse mAb (1:5000 diluted). Predicted band size:17KDa. Observed band size:17KDa.

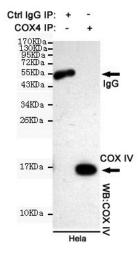




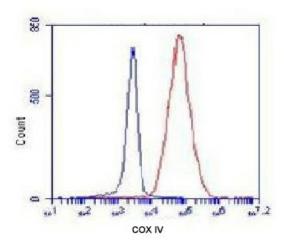
Immunohistochemical analysis of paraffinembedded human colorectal carcinoma with COX IV Mouse mAb (4D11-B3-E8, 1:50 diluted), showing cytoplasm localization. A high pressure mediated antigen retrieval step was performed in citrate buffer (pH6.0).



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



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



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.