

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 |
| lsotype: | lgG1 |
| 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,0.1mg/mlBSA and 50% glycerol. |
| Purification: | Affinity purified |
| Predicted Protein Size: | 17 kDa |
| Gene Name: | cytochrome c oxidase subunit 4l1 |
| Database Link: | <u>NP_001852 Entrez Gene 12857 MouseEntrez Gene 29445 RatEntrez Gene 1327 Human</u> |
| 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 |



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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.

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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.

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

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