

Basic Information

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|--------------------|---|--|
| Product Name | Anti-COX4I1 Antibody | |
| Gene Name | COX4I1 | |
| Source | Rabbit | |
| Clonality | Polyclonal | |
| Isotype | IgG | |
| Species Reactivity | human, mouse, rat | |
| Tested Application | WB, IHC, ICC/IF, FCM | |
| Contents | 500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol. | |
| Immunogen | E. coli-derived human COX IV recombinant protein (Position: Q59-K169). | |
| Purification | Immunogen affinity purified. | |
| Observed MW | 17 kDa | |
| Dilution Ratios | Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Enzyme linked immunosorbent assay (ELISA): 1:100-1000 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Flow Cytometry (Fixed): 1:50-200 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user. | |

Storage

12 months from date of receipt, -20°C as supplied.

Background Information

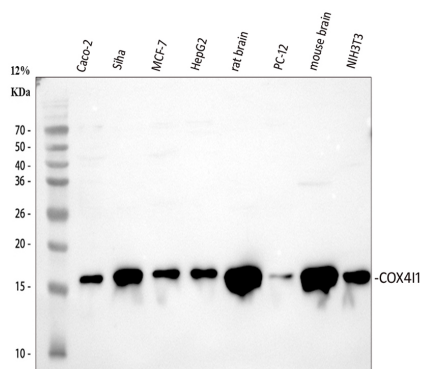
Cytochrome c oxidase subunit 4 isoform 1, mitochondrial is an enzyme that in humans is encoded by the COX4I1 gene. Cytochrome c oxidase (COX) is the terminal enzyme of the mitochondrial respiratory chain. It is a multi-subunit enzyme complex that couples the transfer of electrons from cytochrome c to 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 13 and 14.

Reference

Anti-COX4I1 Antibody 被引用在1文献中。

Selected Validation Data



Western blot analysis of COX4I1 using anti-COX4I1 antibody

(A05442-1). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Caco-2 whole cell lysates,

Lane 2: human SiHa whole cell lysates,

Lane 3: human MCF-7 whole cell lysates,

Lane 4: human HepG2 whole cell lysates,

Lane 5: rat brain tissue lysates,

Lane 6: rat PC-12 whole cell lysates,

Lane 7: mouse brain tissue lysates,

Lane 8: mouse NIH/3T3 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-COX4I1 antigen

affinity purified polyclonal antibody (A05442-1) at a dilution of

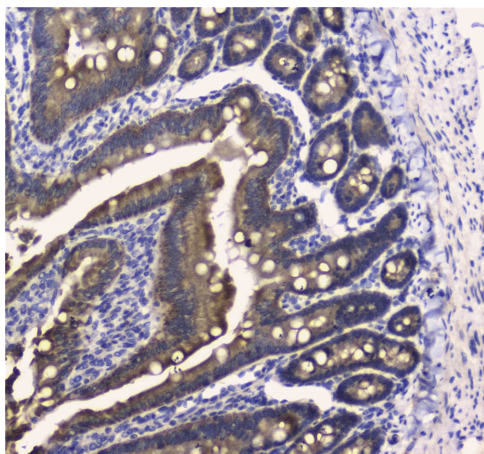
1:1000 and probed with a goat anti-rabbit IgG-HRP secondary

antibody (Catalog # BA1054). The signal is developed using ECL Plus

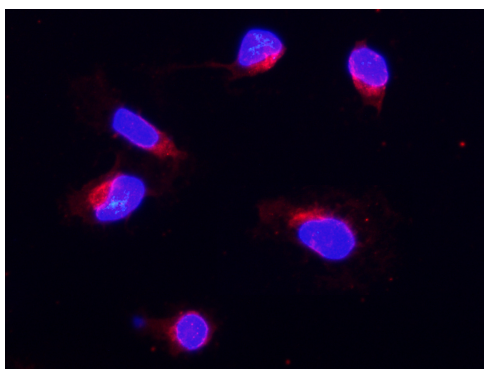
Western Blotting Substrate (Catalog # AR1197). A specific band was

detected for COX4I1 at approximately 17 kDa. The expected band

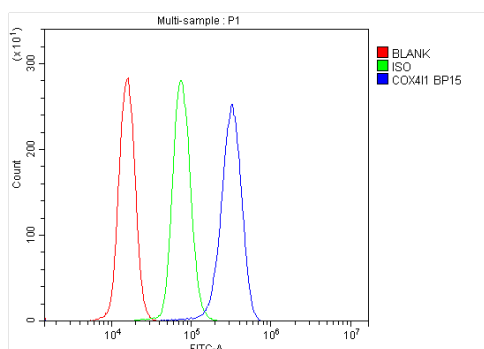
size for COX4I1 is at 20 kDa.



IHC analysis of COX4I1 using anti-COX4I1 antibody (A05442-1). COX4I1 was detected in a paraffin-embedded section of mouse small intestine tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-COX4I1 Antibody (A05442-1) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.



ICC/IF analysis of COX4I1 using anti-COX4I1 antibody (A05442-1). COX4I1 was detected in an immunocytochemical section of U2OS cells. The section was incubated with rabbit anti-COX4I1 Antibody (A05442-1) at a dilution of 1:100. Fluoro594-conjugated Anti-rabbit IgG Secondary Antibody (red)(Catalog#BA1142) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



Flow Cytometry analysis of U937 cells using anti-COX4I1 antibody (A05442-1).

Overlay histogram showing U937 cells stained with A05442-1 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-COX4I1 Antibody (A05442-1) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

Product datasheet

Anti-COX4I1 Antibody

Catalog Number: **A05442-1**



antibody and ELISA experts

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