

## Basic Information

Product Name	Anti-COX4I1 Antibody
Gene Name	COX4I1
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB, IHC
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of COX IV/COX4I1, which shares 83.3% and 88.9% amino acid (aa) sequence identity with mouse and rat COX4I1, respectively.
Concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	17 kDa
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 (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

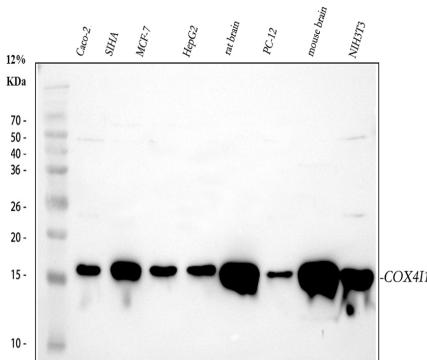
Cytochrome c oxidase subunit 4 isoform 1, mitochondrial is an enzyme that in humans is encoded by the COX4I1 gene. Cytochrome c oxidase (COX) is the terminal enzyme of the mitochondrial respiratory chain. It is a multi-subunit enzyme complex that couples the transfer of electrons from cytochrome c to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

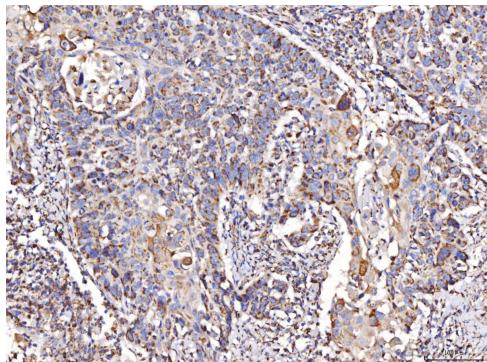
## Selected Validation Data



Western blot analysis of COX4I1 using anti-COX4I1 antibody (A05442-2). 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 (A05442-2) 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 (A05442-2). COX4I1 was detected in a paraffin-embedded section of human Bladder epithelial carcinoma tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-COX4I1 Antibody (A05442-2) at a dilution of 1:200 and developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.