Leader in Biomolecular Solutions for Life Science

COX IV Rabbit pAb

Catalog No.: A6564 37 Publications



Basic Information

Observed MW

17kDa

Calculated MW

20kDa

Category

Polyclonal Antibody

Applications

WB,IHC-P,IF/ICC,IP,ELISA

Cross-Reactivity

Human, Mouse, Rat

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 13 and 14. Alternative splicing results in multiple transcript variants encoding different isoforms.

Recommended Dilutions

WB 1:1000 - 1:5000

IHC-P 1:50 - 1:200

IF/ICC 1:50 - 1:200

IP 0.5μg-4μg antibody for 200μg-400μg extracts of

whole cells

Immunogen Information

Gene ID Swiss Prot 1327 P13073

Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids 23-98 of human COX IV (NP 001852.1).

Synonyms

COX4; COXIV; COX4-1; COXIV-1; MC4DN16; COX IV-1; COX IV

Contact

www.abclonal.com

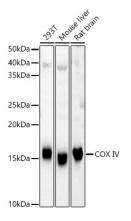
Product Information

SourceIsotypePurificationRabbitIgGAffinity purification

Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.01% thimerosal,50% glycerol,pH7.3.



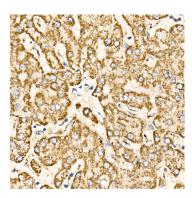
Western blot analysis of various lysates using COX IV Rabbit pAb (A6564) at 1:2000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

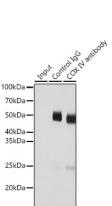
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

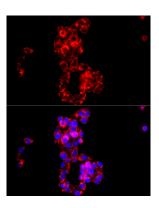
Exposure time: 10s.



Immunohistochemistry analysis of COX IV in paraffin-embedded human liver using COX IV Rabbit pAb (A6564) at dilution of 1:100 (40x lens).Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.



15kDa 10kDa



Immunofluorescence analysis of HepG2 cells using COX IV Rabbit pAb (A6564) at dilution of 1:50 (40x lens). Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.

Immunoprecipitation analysis of 200 μ g extracts of HeLa cells using 3 μ g COX IV antibody (A6564). Western blot was performed from the immunoprecipitate using COX IV antibody (A6564) at a dilution of 1:1000.