

A6564

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COX IV Rabbit pAb

Catalog No.: A6564

46 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

ELISA Recommended starting
concentration is 1
µg/mL. Please optimize
the concentration
based on your specific
assay requirements.

Immunogen Information

Gene ID

1327

Swiss Prot

P13073

Immunogen

Recombinant protein (or fragment). This information is considered to be commercially sensitive.

Synonyms

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

Product Information

Source

Rabbit

Isotype

IgG

Purification

Affinity purification

Storage

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

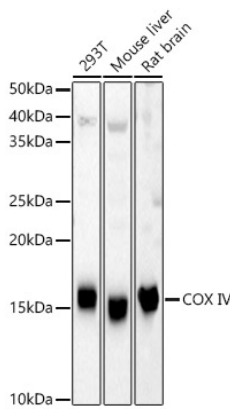
Buffer: PBS containing 50% glycerol, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

Contact

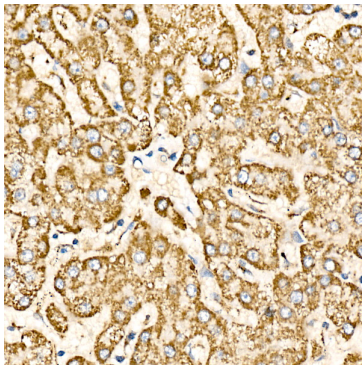


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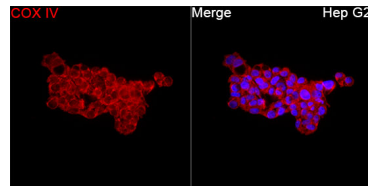
Validation Data



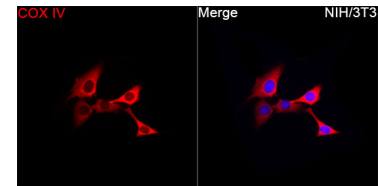
Western blot analysis of various lysates using COX IV Rabbit pAb (A6564) at 1:2000 dilution.
 Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
 Lysates/proteins: 25µg per lane.
 Blocking buffer: 3% nonfat dry milk in TBST.
 Detection: ECL Basic Kit (RM00020).
 Exposure time: 10s.



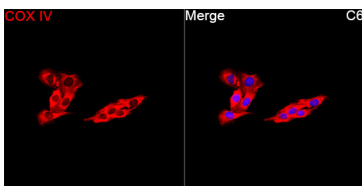
Immunohistochemistry analysis of paraffin-embedded Human liver using COX IV Rabbit pAb (A6564) at dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



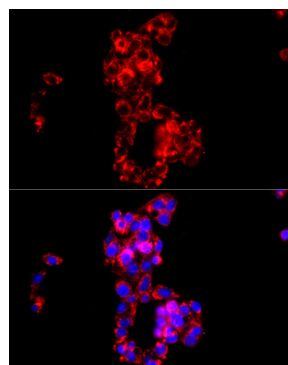
Immunofluorescence analysis of Hep G2 cells using COX IV Rabbit pAb (A6564) at a dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L)(AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of NIH/3T3 cells using COX IV Rabbit pAb (A6564) at a dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L)(AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.

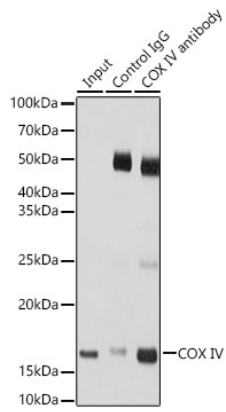


Immunofluorescence analysis of C6 cells using COX IV Rabbit pAb (A6564) at a dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L)(AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



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

Validation Data



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