A22871

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[KD Validated] COX IV Rabbit pAb

Catalog No.: A22871

Basic Information

Observed MW
17kDa

Calculated MW
20kDa

Category
Polyclonal Antibody

Applications
WB,IHC-P,IF/ICC,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	1:100 - 1:500
IHC-P	1:50 - 1:200
IF/ICC	1:50 - 1:200

Immunogen Information

Gene ID
1327

Swiss Prot
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; [KD Validated] COX IV

Contact

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Product Information

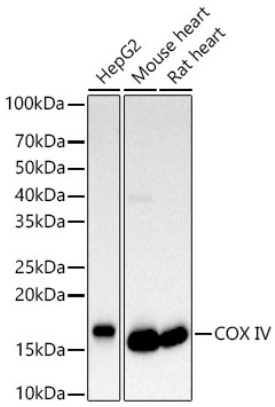
Source
Rabbit

Isotype
IgG

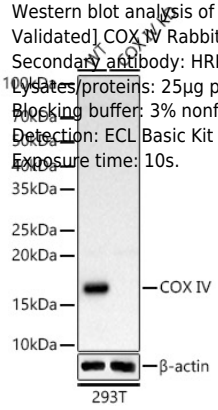
Purification
Affinity purification

Storage
Store at -20℃. Avoid freeze / thaw cycles.
Buffer: PBS with 0.01% thimerosal,50% glycerol,pH7.3.

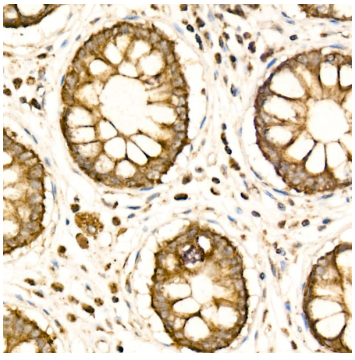
Validation Data



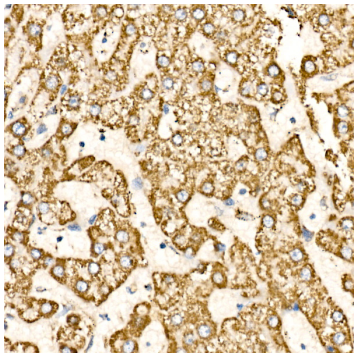
Western blot analysis of various lysates, using [KD Validated] COX IV Rabbit pAb (A22871) at 1:500 dilution.
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 10s.



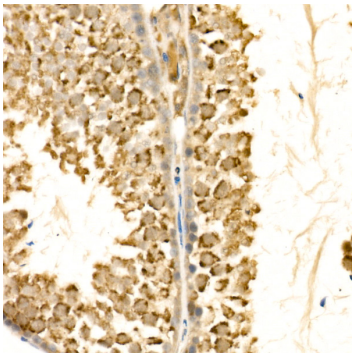
Western blot analysis of lysates from wild type(WT) and COX IVknockdown (KD) 293T cells, using [KD Validated] COX IV Rabbit pAb (A22871) at 1:500 dilution.
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 10s.



Immunohistochemistry analysis of COX IV in paraffin-embedded human colon carcinoma using [KD Validated] COX IV Rabbit pAb (A22871) 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.

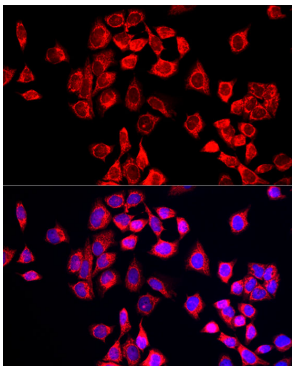


Immunohistochemistry analysis of COX IV in paraffin-embedded human liver using [KD Validated] COX IV Rabbit pAb (A22871) at dilution of 1:100 (40x lens).Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.

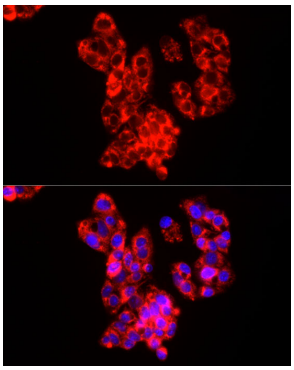


Immunohistochemistry analysis of COX IV in paraffin-embedded mouse testis using [KD Validated] COX IV Rabbit pAb (A22871) at dilution of 1:100 (40x lens).Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.

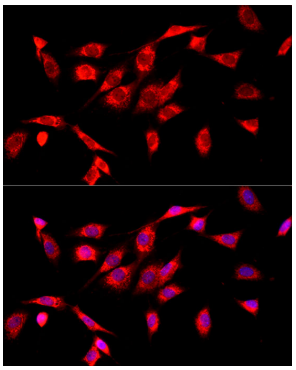
Validation Data



Immunofluorescence analysis of HeLa cells using [KD Validated] COX IV Rabbit pAb (A22871) 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.



Immunofluorescence analysis of HepG2 cells using [KD Validated] COX IV Rabbit pAb (A22871) 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.



Immunofluorescence analysis of NIH/3T3 cells using [KD Validated] COX IV Rabbit pAb (A22871) 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.