Anti-COX IV Antibody

R1706-1



Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IF-Cell, IHC-P, FC
Molecular Wt:	Predicted band size: 20 kDa
Description:	Cytochrome c oxidase (COX) functions as the terminal oxidase of the respiratory chain that uses cytochrome c as an electron donor to drive a proton gradient across the inner mitochondrial membrane. The mammalian COX apoenzyme is a heteromer consisting of three mitochondrial encoded catalytic subunits and several nuclear gene encoded structural subunits. COX contains two iron-coordination sites and two copper-coordination sites. Cytochrome c oxidase IV (COX4) is a nuclear-encoded subunit of COX that may play a role in regulating COX activity. COX4 is expressed ubiquitously in adult human tissue with the strongest levels of expression in the pancreas and moderate expression levels in heart, skeletal muscle and placenta.
Immunogen:	Synthetic peptide within human COX IV aa 46-89.
Positive control:	Rat heart tissue, Hela, MCF-7, HepG2, human colon cancer tissue, human kidney tissue, mouse heart tissue.
Subcellular location:	Mitochondrion inner membrane.
Database links:	SwissProt: P13073 Human P19783 Mouse P10888 Rat
Recommended Dilutions:	
WB	1:1,000-1:2,000
IF-Cell	1:100-1:500
IHC-P	1:50-1:200
FC	1:50-1:100
Storage Buffer:	1*PBS (pH7.4), 0.2% BSA, 50% Glycerol. Preservative: 0.05% Sodium Azide.
Storage Instruction:	Store at +4 $^\circ\!\!\mathbb{C}$ after thawing. Aliquot store at -20 $^\circ\!\!\mathbb{C}$ or -80 $^\circ\!\!\mathbb{C}$. Avoid repeated freeze / thaw cycles.
Purity:	Immunogen affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

45 Service mail:support@huabio.cn



Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

R1706-1 - Page 2

Images

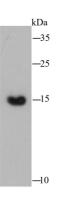


Fig1: Western blot analysis of COX IV on rat heart tissue lysate using anti-COX IV antibody at 1/2,000 dilution.

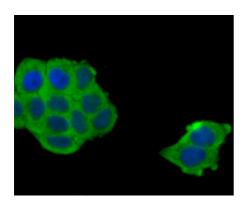


Fig2: ICC staining COX IV in Hela cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

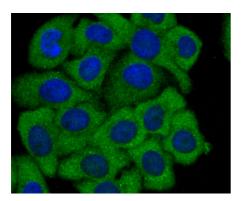


Fig3: ICC staining COX IV in HepG2 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

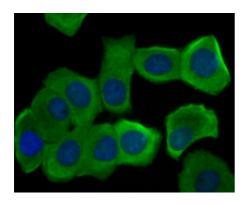


Fig4: ICC staining COX IV in MCF-7 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

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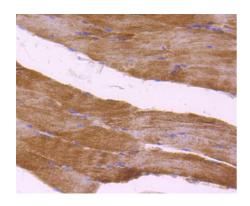


Fig5: Immunohistochemical analysis of paraffin-embedded rat skeletal muscle tissue using anti-COX IV antibody. Counter stained with hematoxylin.

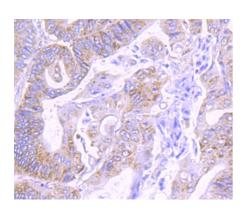


Fig6: Immunohistochemical analysis of paraffin-embedded human colon cancer tissue using anti-COX IV antibody. Counter stained with hematoxylin.

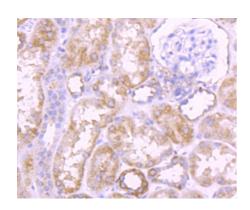


Fig7: Immunohistochemical analysis of paraffin-embedded human kidney tissue using anti-COX IV antibody. Counter stained with hematoxylin.

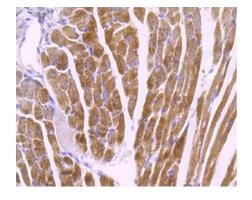


Fig8: Immunohistochemical analysis of paraffin-embedded mouse heart tissue using anti-COX IV antibody. Counter stained with hematoxylin.

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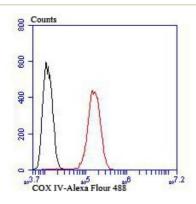


Fig9: Flow cytometric analysis of Hela cells with COX IV antibody at 1/100 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black).

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

- 1. Nguyen QL et al. Platelets from pulmonary hypertension patients show increased mitochondrial reserve capacity. JCI Insight 2:e91415 (2017).
- 2. Jin X et al. Dysregulation of INF2-mediated mitochondrial fission in SPOP-mutated prostate cancer. PLoS Genet 13:e1006748 (2017).

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