

Anti-Cytochrome b-c1 complex subunit 9/UQCR10 Antibody

HA500222



Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB, IHC-P, IF-Cell, FC
Molecular Wt:	Predicted band size: 7 kDa

Description: Component of the ubiquinol-cytochrome c oxidoreductase, a multisubunit transmembrane complex that is part of the mitochondrial electron transport chain which drives oxidative phosphorylation. The respiratory chain contains 3 multisubunit complexes succinate dehydrogenase (complex II, CII), ubiquinol-cytochrome c oxidoreductase (cytochrome b-c1 complex, complex III, CIII) and cytochrome c oxidase (complex IV, CIV), that cooperate to transfer electrons derived from NADH and succinate to molecular oxygen, creating an electrochemical gradient over the inner membrane that drives transmembrane transport and the ATP synthase. The cytochrome b-c1 complex catalyzes electron transfer from ubiquinol to cytochrome c, linking this redox reaction to translocation of protons across the mitochondrial inner membrane, with protons being carried across the membrane as hydrogens on the quinol. In the process called Q cycle, 2 protons are consumed from the matrix, 4 protons are released into the intermembrane space and 2 electrons are passed to cytochrome c.

Immunogen: Synthetic peptide within C-terminal human UQCR10 from aa42-aa63 .

Positive control: MCF7 cell lysate, HeLa cell lysate, human skeletal muscle tissue, MCF7.

Subcellular location: Mitochondrion inner membrane.

Database links: SwissProt: Q9UDW1 Human

Recommended Dilutions:

WB	1:5,000
IHC-P	1:1,000
IF-Cell	1:250
FC	1:1,000

Storage Buffer: 1*TBS (pH7.4), 0.2% BSA, 50% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4°C. Store at +4°C short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20°C long term.

Purity: Immunogen affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

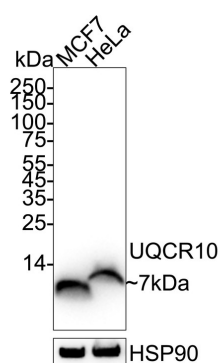
Service mail:support@huabio.cn

华安生物
HUABIO
www.huabio.cn

Fig1: Western blot analysis of Cytochrome b-c1 complex subunit 9/UQCR10 on different lysates with Rabbit anti-Cytochrome b-c1 complex subunit 9/UQCR10 antibody (HA500222) at 1/5,000 dilution.

Lane 1: MCF7 cell lysate

Lane 2: HeLa cell lysate



Lysates/proteins at 20 µg/Lane.

Predicted band size: 7 kDa

Observed band size: 7 kDa

Exposure time: 9 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA500222) at 1/5,000 dilution was used in primary antibody dilution (K1803) at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

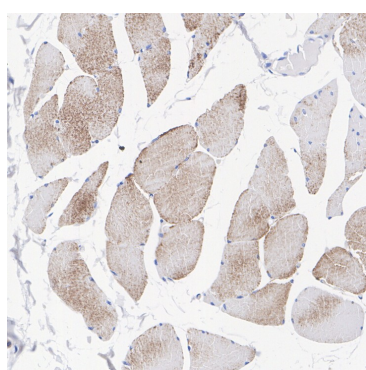
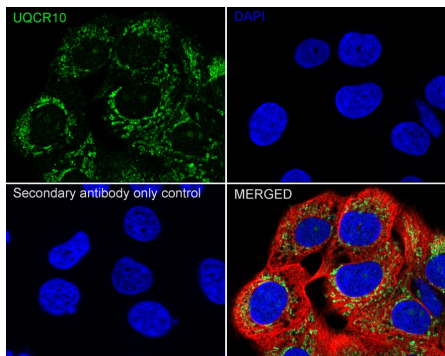


Fig2: Immunohistochemical analysis of paraffin-embedded human skeletal muscle tissue with Rabbit anti-Cytochrome b-c1 complex subunit 9/UQCR10 antibody (HA500222) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (HA500222) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Fig3: Immunocytochemistry analysis of MCF7 cells labeling Cytochrome b-c1 complex subunit 9/UQCR10 with Rabbit anti-Cytochrome b-c1 complex subunit 9/UQCR10 antibody (HA500222) at 1/250 dilution.



Cells were fixed in 4% paraformaldehyde for 15 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS for 15 minutes at room temperature, then blocked with 1% BSA in 10% negative goat serum for 1 hour at room temperature. Cells were then incubated with Rabbit anti-Cytochrome b-c1 complex subunit 9/UQCR10 antibody (HA500222) at 1/250 dilution in 1% BSA in PBST overnight at 4 °C. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.

Beta tubulin (HA601187, red) was stained at 1/100 dilution overnight at +4°C. Goat Anti-Mouse IgG H&L (iFluor™ 594, HA1126) was used as the secondary antibody at 1/1,000 dilution.

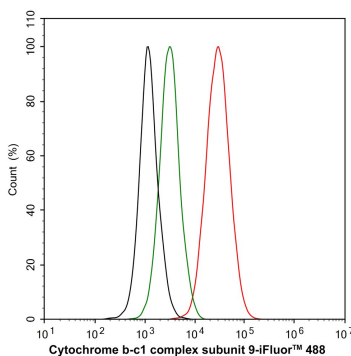


Fig4: Flow cytometric analysis of MCF7 cells labeling Cytochrome b-c1 complex subunit 9/UQCR10.

Cells were fixed and permeabilized. Then stained with the primary antibody (HA500222, 1/1,000) (red) compared with Rabbit IgG Isotype Control (green). After incubation of the primary antibody at +4°C for an hour, the cells were stained with a iFluor™ 488 conjugate-Goat anti-Rabbit IgG Secondary antibody (HA1121) at 1/1,000 dilution for 30 minutes at +4°C. Unlabelled sample was used as a 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. Schaeffer H. et. al. Ubiquinol-cytochrome-c reductase from human and bovine mitochondria. *Methods Enzymol.* 260:82-96(1995)

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

华安生物
HUABIO
www.huabio.cn