

UQCRC2 Antibody

Rabbit mAb Catalog # AP91539

Specification

UQCRC2 Antibody - Product Information

Application WB, IHC, FC, ICC, IP

Primary Accession P22695
Reactivity Rat

Clonality Monoclonal

Other Names

Core protein II; QCR2; mitochondrial; Ubiquinol cytochrome c reductase core protein II; UQCR2;

Uqcrc2;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 48443 Da

UQCRC2 Antibody - Additional Information

Dilution WB~~1:1000

IHC~~1:100~500 FC~~1:10~50 ICC~~N/A

IP~~N/A

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

UQCRC2

Description This is a component of the

ubiquinol-cytochrome c reductase complex (complex III or cytochrome b-c1 complex),

which is part of the mitochondrial

respiratory chain. The core protein 2 is required for the assembly of the complex.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline,

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

UQCRC2 Antibody - Protein Information

Name UQCRC2

Function

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 (By similarity). The 2 core subunits UQCRC1/QCR1 and UQCRC2/QCR2 are homologous to the 2 mitochondrial-processing peptidase (MPP) subunits beta-MPP and alpha-MPP respectively, and they seem to have preserved their MPP processing properties (By similarity). May be involved in the in situ processing of UQCRFS1 into the mature Rieske protein and its mitochondrial targeting sequence (MTS)/subunit 9 when incorporated into complex III (Probable).

Cellular Location

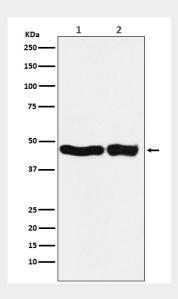
Mitochondrion inner membrane {ECO:0000250|UniProtKB:P07257}; Peripheral membrane protein {ECO:0000250|UniProtKB:P07257}; Matrix side {ECO:0000250|UniProtKB:P07257}

UQCRC2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

UQCRC2 Antibody - Images



Western blot analysis of UQCRC2 expression in (1) HEK293 cell lysate; (2) Mouse kidney lysate.