

UQCRC2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14382c

Specification

UQCRC2 Antibody (Center) - Product Information

Application	WB,E
Primary Accession	<u>P22695</u>
Other Accession	<u>NP_003357.2</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	48443
Antigen Region	235-264

UQCRC2 Antibody (Center) - Additional Information

Gene ID 7385

Other Names

Cytochrome b-c1 complex subunit 2, mitochondrial, Complex III subunit 2, Core protein II, Ubiquinol-cytochrome-c reductase complex core protein 2, UQCRC2

Target/Specificity

This UQCRC2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 235-264 amino acids from the Central region of human UQCRC2.

Dilution WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

UQCRC2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

UQCRC2 Antibody (Center) - 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 aradient 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 guinol. 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 (Center) - Protocols

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

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

UQCRC2 Antibody (Center) - Images



UQCRC2 Antibody (Center) (Cat. #AP14382c) western blot analysis in WiDr cell line lysates (35ug/lane).This demonstrates the UQCRC2 antibody detected the UQCRC2 protein (arrow).



UQCRC2 Antibody (Center) - Background

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.

UQCRC2 Antibody (Center) - References

Shimada, M., et al. Hum. Genet. 128(4):433-441(2010) Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) : Hu, W.H., et al. J. Neurochem. 81(1):36-45(2002) Duncan, A.M., et al. Genomics 18(2):455-456(1993) Hosokawa, Y., et al. Biochem. Int. 20(4):731-737(1990)