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UQCRC2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14382c

Product Information

Application	WB, E
Primary Accession	P22695
Other Accession	NP_003357.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB34280
Calculated MW	48443
Antigen Region	235-264

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.

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}

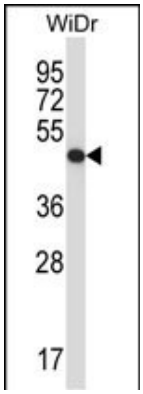
Background

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.

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)

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).