

UQCRC2 Antibody (Center) Blocking Peptide Synthetic peptide

Catalog # BP14382c

Specification

UQCRC2 Antibody (Center) Blocking Peptide - Product Information

Primary Accession

<u>P22695</u>

UQCRC2 Antibody (Center) Blocking Peptide - 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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

UQCRC2 Antibody (Center) Blocking Peptide - 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), ubiguinol-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 UOCRFS1 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) Blocking Peptide - Protocols

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

Blocking Peptides

UQCRC2 Antibody (Center) Blocking Peptide - Images

UQCRC2 Antibody (Center) Blocking Peptide - 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) Blocking Peptide - 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)