10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

UQCRFS1 Antibody (C-term) Blocking peptide
Synthetic peptide
Catalog # BP11659b

Specification

UQCRFS1 Antibody (C-term) Blocking peptide - Product Information

Primary Accession P47985

UQCRFS1 Antibody (C-term) Blocking peptide - Additional Information

Gene ID 7386

Other Names
Cytochrome b-c1 complex subunit Rieske, mitochondrial, Complex III subunit 5, Cytochrome b-c1 complex subunit 5, Rieske iron-sulfur protein, RISP, Ubiquinol-cytochrome c reductase iron-sulfur subunit, Cytochrome b-c1 complex subunit 11, Complex III subunit IX, Ubiquinol-cytochrome c reductase 8 kDa protein, UQCRFS1

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.

UQCRFS1 Antibody (C-term) Blocking peptide - Protein Information

Name UQCRFS1 (HGNC:12587)

Function
[Cytochrome b-c1 complex subunit Rieske, mitochondrial]: Component of the ubiquinol-cytochrome c oxidoreductase, a multisubunit transmembrane complex that is part of the mitochondrial electron transport chain which drives oxidative phosphorylation (PubMed:31883641). 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. The Rieske protein is a catalytic core subunit containing a [2Fe-2S] iron- sulfur cluster. It cycles between 2 conformational states during catalysis to transfer electrons

from the quinol bound in the Q(0) site in cytochrome b to cytochrome c1 (By similarity). Incorporation of UQCRFS1 is the penultimate step in complex III assembly (PubMed:28673544).

Cellular Location
Mitochondrion inner membrane; Single-pass membrane protein {ECO:0000250|UniProtKB:Q5ZLR5}

UQCRFS1 Antibody (C-term) Blocking peptide - Protocols

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

- Blocking Peptides

UQCRFS1 Antibody (C-term) Blocking peptide - Images

UQCRFS1 Antibody (C-term) Blocking peptide - Background

Component of the ubiquinol-cytochrome c reductase complex (complex III or cytochrome b-c1 complex), which is a respiratory chain that generates an electrochemical potential coupled to ATP synthesis.The transit peptide of the Rieske protein seems to form part of the bc1 complex and is considered to be the subunit 11/IX of that complex (By similarity).

UQCRFS1 Antibody (C-term) Blocking peptide - References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :Wang, L., et al. Cancer Epidemiol. Biomarkers Prev. 17(12):3558-3566(2008)Lamesch, P., et al. Genomics 89(3):307-315(2007)Grimwood, J., et al. Nature 428(6982):529-535(2004)Ohashi, Y., et al. Gynecol. Oncol. 93(1):54-58(2004)