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

UQCRFS1 Antibody
Rabbit Polyclonal Antibody
Catalog # ALS16169

Specification

UQCRFS1 Antibody - Product Information

Application	**IHC, WB**
Primary Accession	P47985
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**30kDa KDa**

UQCRFS1 Antibody - Additional Information

Gene ID 7386

Other Names
Cytochrome b-c1 complex subunit Rieske, mitochondrial, 1.10.2.2, 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

Target/Specificity
Human UQCRFS1

Reconstitution & Storage
Aliquot and store at -20°C or -80°C. Avoid freeze-thaw cycles.

Precautions
UQCRFS1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

UQCRFS1 Antibody - 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).

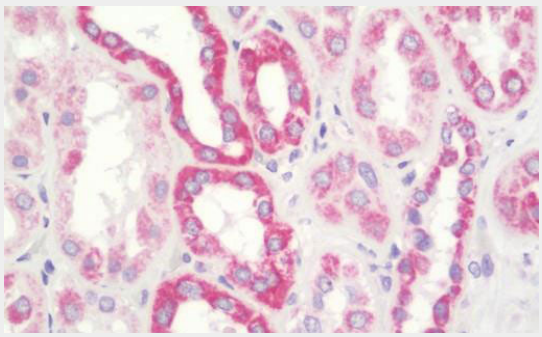
Cellular Location
Mitochondrion inner membrane; Single-pass membrane protein {ECO:0000250|UniProtKB:Q5ZLR5}

UQCRFS1 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

UQCRFS1 Antibody - Images



Anti-UQCRFS1 antibody IHC staining of human kidney.

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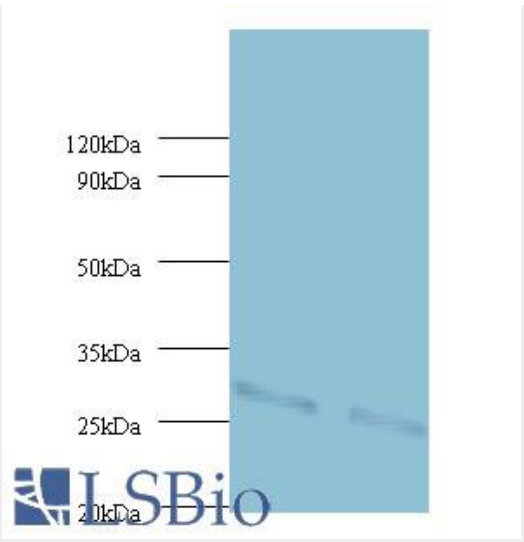

Western Blot: UQCRFS1 antibody at 2 µg/ml.

UQCRFS1 Antibody - 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.

UQCRFS1 Antibody - References

Nishikimi M.,et al.Biochem. Int. 20:155-160(1990).
Pennacchio L.,et al.Gene 155:207-211(1995).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Grimwood J.,et al.Nature 428:529-535(2004).
Sarto C.,et al.Electrophoresis 18:599-604(1997).