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UQCRFS1 Antibody

Rabbit mAb
Catalog # AP91811

Product Information

Application	WB, IHC, IF, FC, ICC, IP, IHF
Primary Accession	P47985
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	petC; PGR1; RIP1; RIS1; RISP; UQCR5; UQCRFS1;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	29668

Additional Information

Dilution	WB 1:500~1:2000 IHC 1:100~1:500 ICC/IF 1:50~1:200 IP 1:50 FC 1:100
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human UQCRFS1
Description	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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

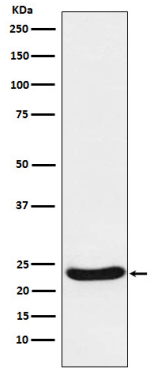
Protein Information

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}

Images



Western blot analysis of UQCRFS1 expression in Raji cell lysate.

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