

UQCRFS1 (PT1209R) PT™ Rabbit mAb

CatalogNo: YM9051 Recombinant R

Key Features

Host Species

Rabbit

MW

Isotype

30kD (Calculated)
24kD (Observed)

IgG,Kappa

Reactivity

Human, Mouse, Rat

Applications

WB,IHC,IF,IP,ELISA

Recommended Dilution Ratios

IHC 1:200-1:1000 WB 1:500-1:2000 IF 1:200-1:1000

ELISA 1:5000-1:20000

IP 1:50-1:200

Storage

Storage* -15°C to -25°C/1 year(Do not lower than -25°C)

Formulation PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA

Basic Information

Clonality Monoclonal

Clone Number PT1209R

Immunogen Information

Specificity Endogenous

| Target Information

Gene name

UQCRFS1

Protein Name

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) [Cleaved into: Cytochrome b-c1 complex subunit 11 (Complex III subunit IX) (Ubiquinol-cytochrome c reductase 8 kDa protein)]

Organism	Gene ID	UniProt ID
Human	<u>7386;</u>	<u>P47985;</u>
Mouse	<u>66694;</u>	<u>Q9CR68;</u>
Rat	<u>291103;</u>	<u>P20788</u> ;

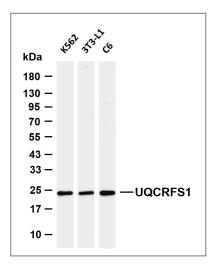
Cellular Localization

Mitochondrion inner membrane; Single-pass membrane protein.

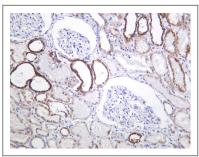
Function

[Cytochrome b-c1 complex subunit Rieske, mitochondrial]: Component of the ubiquinolcytochrome 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 O 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 . ; [Cytochrome b-c1 complex subunit 9]: Component of the ubiquinol-cytochrome c oxidoreductase (cytochrome b-c1 complex, complex III, CIII). UQCRFS1 undergoes proteolytic processing once it is incorporated in the complex III dimer. One of the fragments, called subunit 9, corresponds to its mitochondrial targeting sequence (MTS). The proteolytic processing is necessary for the correct insertion of UQCRFS1 in the complex III dimer, but the persistence of UQCRFS1-derived fragments may prevent newly imported UQCRFS1 to be processed and assembled into complex III and is detrimental for the complex III structure and function.

| Validation Data



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-UQCRFS1 (PT1209R) antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: K562 Lane 2: 3T3-L1 Lane 3: C6 Predicted band size: 30kDa Observed band size: 24kDa



Human kidney was stained with anti-UQCRFS1 (PT1209R) Rabbit antibody

| Contact information

Orders: order@immunoway.com Support: tech@immunoway.com

Telephone: 877-594-3616 (Toll Free), 408-747-0185

Website: http://www.immunoway.com

Address: 2200 Ringwood Ave San Jose, CA 95131 USA



Please scan the QR code to access additional product information: **UQCRFS1 (PT1209R)**

PT™ Rabbit mAb

For Research Use Only. Not for Use in Diagnostic Procedures.

Antibody | ELISA Kits | Protein | Reagents