

**UQCRC1 Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP18967a****Specification**

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**UQCRC1 Antibody (N-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">P31930</a>
Other Accession	<a href="#">Q68FY0</a> , <a href="#">Q9CZ13</a> , <a href="#">NP_003356.2</a>
Reactivity	Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	52646
Antigen Region	141-170

**UQCRC1 Antibody (N-term) - Additional Information****Gene ID** 7384**Other Names**

Cytochrome b-c1 complex subunit 1, mitochondrial, Complex III subunit 1, Core protein I, Ubiquinol-cytochrome-c reductase complex core protein 1, UQCRC1

**Target/Specificity**

This UQCRC1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 141-170 amino acids from the N-terminal region of human UQCRC1.

**Dilution**

WB~~1:1000

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

UQCRC1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**UQCRC1 Antibody (N-term) - Protein Information****Name** UQCRC1

**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), 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 (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 UQCRFS1 into the mature Rieske protein and its mitochondrial targeting sequence (MTS)/subunit 9 when incorporated into complex III (Probable). Seems to play an important role in the maintenance of proper mitochondrial function in nigral dopaminergic neurons (PubMed:[33141179](#)).

#### **Cellular Location**

Mitochondrion inner membrane {ECO:0000250|UniProtKB:P07256}; Peripheral membrane protein {ECO:0000250|UniProtKB:P07256}; Matrix side {ECO:0000250|UniProtKB:P07256}

#### **Tissue Location**

Expressed in brain, including substantia nigra, striatum, cortex and cerebellum, and in spinal cord, heart, kidney, liver and muscle.

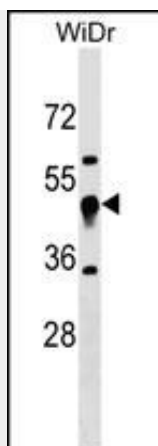
### **UQCRC1 Antibody (N-term) - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **UQCRC1 Antibody (N-term) - Images**





UQCRC1 Antibody (N-term) (Cat. #AP18967a) western blot analysis in WiDr cell line lysates (35ug/lane). This demonstrates the UQCRC1 antibody detected the UQCRC1 protein (arrow).

#### **UQCRC1 Antibody (N-term) - 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. This protein may mediate formation of the complex between cytochromes c and c1.

#### **UQCRC1 Antibody (N-term) - References**

Martins-de-Souza, D., et al. J Psychiatr Res 43(11):978-986(2009)  
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Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) :  
Kulawiec, M., et al. Cancer Biol. Ther. 5(8):967-975(2006)  
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