

UQCRC1 Antibody (clone 1G6)
Mouse Monoclonal Antibody
Catalog # ALS16340**Specification**

UQCRC1 Antibody (clone 1G6) - Product Information

Application	WB, IHC
Primary Accession	P31930
Reactivity	Human, Mouse, Rat, Monkey, Dog
Host	Mouse
Clonality	Monoclonal
Calculated MW	53kDa KDa

UQCRC1 Antibody (clone 1G6) - 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

Human UQCRC1

Reconstitution & Storage

Store at -20°C. Minimize freezing and thawing.

Precautions

UQCRC1 Antibody (clone 1G6) is for research use only and not for use in diagnostic or therapeutic procedures.

UQCRC1 Antibody (clone 1G6) - 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.

Volume

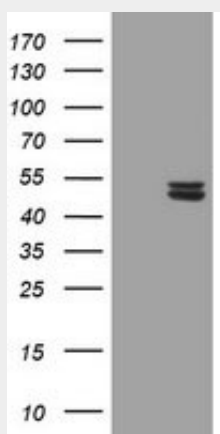
50 µl

UQCRC1 Antibody (clone 1G6) - Protocols

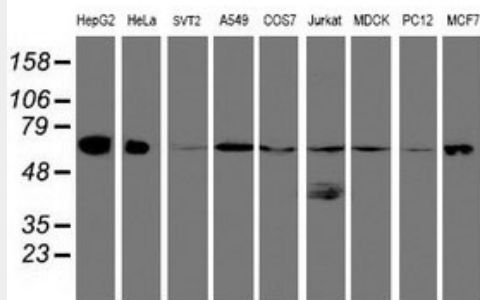
Provided below are standard protocols that you may find useful for product applications.

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

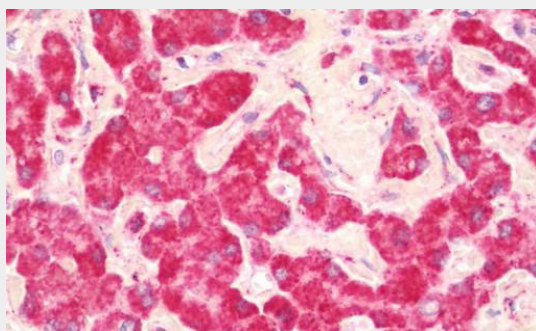
UQCRC1 Antibody (clone 1G6) - Images



HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY UQCRC1...



Western blot of extracts (35 ug) from 9 different cell lines by using g anti-UQCRC1 monoclonal...



Anti-UQCRC1 antibody IHC staining of human liver.



Anti-UQCRC1 antibody IHC staining of human small intestine.

UQCRC1 Antibody (clone 1G6) - 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 (clone 1G6) - References

Hoffman G.G.,et al.J. Biol. Chem. 268:21113-21119(1993).
Islam M.M.,et al.Biochem. Mol. Biol. Int. 32:797-805(1994).
Islam M.M.,et al.Biochem. Mol. Biol. Int. 33:410-410(1994).
Islam M.M.,et al.Biochem. Mol. Biol. Int. 33:815-815(1994).
Ota T.,et al.Nat. Genet. 36:40-45(2004).