

UQCRC2 (C-14): sc-69064

BACKGROUND

Cytochrome c is a well characterized, mobile electron transport protein that is essential to energy conversion in all aerobic organisms. Cytochrome b associates with cytochrome c subunit 1 and the Rieske protein to form complex III (also designated cytochrome bc1 complex), which is involved in cellular respiration. Ubiquinol cytochrome c reductase (UQCRC2), also referred to as Rieske iron-sulfur protein, represents an important subunit of complex III of the mitochondrial respiratory chain that transfers electrons from ubiquinol to cytochrome c. The UQCRC2 complex is made up of 3 respiratory subunits (cytochrome b, cytochrome c1, Rieske protein), 2 core proteins, and 6 low-molecular weight proteins. Ubiquinol cytochrome-c reductase complex core protein 2 (UQCRC2) represents one of the core proteins of UQCRC2, and it is required for the assembly of the complex.

REFERENCES

1. Duncan, A.M., et al. 1993. Assignment of the gene for the core protein II (UQCRC2) subunit of the mitochondrial cytochrome bc1 complex to human chromosome 16p12. *Genomics* 18: 455-456.
2. Jarvela, I.E., et al. 1995. Physical map of the region containing the gene for Batten disease (CLN3). *Am. J. Med. Genet.* 57: 316-319.
3. Hu, W.H., et al. 2002. Identification and characterization of a novel Nogo-interacting mitochondrial protein (NIMP). *J. Neurochem.* 81: 36-45.
4. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 191327. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
5. Wen, J.J., et al. 2004. Oxidative modification of mitochondrial respiratory complexes in response to the stress of *Trypanosoma cruzi* infection. *Free Radic. Biol. Med.* 37: 2072-2081.
6. Sjoblom, T., et al. 2006. The consensus coding sequences of human breast and colorectal cancers. *Science* 314: 268-274.

CHROMOSOMAL LOCATION

Genetic locus: UQCRC2 (human) mapping to 16p12.2; Uqcrc2 (mouse) mapping to 7 F2.

SOURCE

UQCRC2 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of UQCRC2 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-69064 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

UQCRC2 (C-14) is recommended for detection of UQCRC2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

UQCRC2 (C-14) is also recommended for detection of UQCRC2 in additional species, including equine, canine, bovine, porcine and avian.

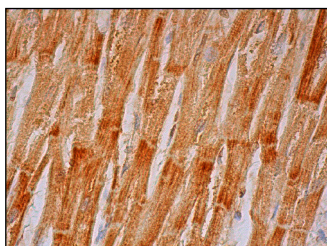
Suitable for use as control antibody for UQCRC2 siRNA (h): sc-72021, UQCRC2 siRNA (m): sc-72022, UQCRC2 shRNA Plasmid (h): sc-72021-SH, UQCRC2 shRNA Plasmid (m): sc-72022-SH, UQCRC2 shRNA (h) Lentiviral Particles: sc-72021-V and UQCRC2 shRNA (m) Lentiviral Particles: sc-72022-V.

Molecular Weight of UQCRC2: 48 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



UQCRC2 (C-14): sc-69064. Immunoperoxidase staining of formalin fixed, paraffin-embedded human heart muscle tissue showing cytoplasmic staining of myocytes.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

MONOS
Satisfaction
Guaranteed

Try **UQCRC2 (G-10): sc-390378** or **UQCRC2 (G-4): sc-390161**, our highly recommended monoclonal alternatives to UQCRC2 (C-14).