

UCRC (E-17): sc-86938

BACKGROUND

UCRC (cytochrome b-c1 complex subunit 9), also known as Ubiquinol-cytochrome c reductase complex 7.2 kDa protein and Complex III subunit X (UQCR10), is a 63 amino acid mitochondrial inner membrane protein that is a component of the ubiquinol-cytochrome c reductase complex, a part of the mitochondrial respiratory chain. This complex consists of eleven subunits and interacts with cytochrome c1. Ubiquinol cytochrome c reductase (complex III) deficiency results when any of the genes encoding the subunits is missing or defective, and causes cardiomyopathy, Leber's myopathy and fatal infant conditions. UCRC is highly expressed in skeletal muscle and heart, where its levels have been shown to be influenced by ovarian hormones. Interestingly, UCRC expression in the heart increases in response to cardiac hypertrophy and hypertension.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: UQCR10 (human) mapping to 22q12.2; Uqcr10 (mouse) mapping to 11 A1.

SOURCE

UCRC (E-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of UCRC 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-86938 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

UCRC (E-17) is recommended for detection of UCRC 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

UCRC (E-17) is also recommended for detection of UCRC in additional species, including porcine.

Suitable for use as control antibody for UCRC siRNA (h): sc-76801, UCRC siRNA (m): sc-154888, UCRC shRNA Plasmid (h): sc-76801-SH, UCRC shRNA Plasmid (m): sc-154888-SH, UCRC shRNA (h) Lentiviral Particles: sc-76801-V and UCRC shRNA (m) Lentiviral Particles: sc-154888-V.

Molecular Weight of UCRC: 7 kDa.

Positive Controls: mouse heart extract: sc-2254.

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.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.