BACKGROUND

Cytochrome c1 is a component of the ubiquinol-cytochrome c reductase complex, which is a respiratory chain that generates an electrochemical potential, coupled to ATP synthesis. Specifically, cytochrome c transfers electrons from the cytochrome bc1 complex to cytochrome c oxidase by transiently binding to the complex. The bc1 complex contains 11 subunits: 3 respiratory subunits (cytochrome b, cytochrome c1 and Rieske/UQCRFS1), 2 core proteins (UQCR1/OQR1 and UQCR2/OQR2) and 6 low-molecular weight proteins (UQCRH/UQR6, UQCRB/UQR7, UOCR/OQR8, UOCR10/UQR9, UOCR11/UQR10 and a cleavage product of Rieske/UQCRFS1). Cytochrome c1 binds one heme per subunit as a result of a mutation-induced collapse of the di-heme cytochrome structure. The cytochrome c1 gene is thought to be regulated by E2F and Sp1 transcription factors.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: CYC1 (human) mapping to 8q24.3; Cyc1 (mouse) mapping to 15 D3.

SOURCE

cytochrome c1 (K-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of cytochrome c1 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-87671 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

cytochrome c1 (K-18) is recommended for detection of cytochrome c1 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).

Suitable for use as control antibody for cytochrome c1 siRNA (h): sc-77573, cytochrome c1 siRNA (m): sc-142761, cytochrome c1 shRNA Plasmid (h): sc-77573-SH, cytochrome c1 shRNA Plasmid (m): sc-142761-SH, cytochrome c1 shRNA (h) Lentiviral Particles: sc-77573-V and cytochrome c1 shRNA (m) Lentiviral Particles: sc-142761-V.

Molecular Weight of cytochrome c1: 35 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.

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.