

NDUFC2 (K-13): sc-109590

BACKGROUND

The multisubunit NADH:ubiquinone oxidoreductase (complex I) is the first enzyme complex in the electron transport chain of mitochondria. Through use of chaotropic agents, complex I can be separated into three different fractions: a flavoprotein fraction, an iron-sulfur protein (IP) fraction and a hydrophobic protein (HP) fraction. NDUFC2 (NADH dehydrogenase [ubiquinone] 1 subunit C2), also known as B14.5b or NADHDH2, is a 119 amino acid mitochondrion inner single-pass membrane protein that belongs to the complex I NDUFC2 subunit family. NDUFC2 is an accessory subunit of the mitochondrial membrane respiratory chain NADH dehydrogenase (complex I) that is not involved in catalysis. Complex I is composed of 45 different subunits and functions in the transfer of electrons from NADH to the respiratory chain. The immediate electron acceptor for the enzyme is suggested to be ubiquinone.

REFERENCES

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5. Flemming, D., et al. 2005. A possible role for iron-sulfur cluster N2 in proton translocation by the NADH: ubiquinone oxidoreductase (complex I). J. Mol. Microbiol. Biotechnol. 10: 208-222.
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CHROMOSOMAL LOCATION

Genetic locus: NDUFC2 (human) mapping to 11q14.1.

STORAGE

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

SOURCE

NDUFC2 (K-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NDUFC2 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-109590 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

NDUFC2 (K-13) is recommended for detection of NDUFC2 of 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 NDUFC2 siRNA (h): sc-96468, NDUFC2 shRNA Plasmid (h): sc-96468-SH and NDUFC2 shRNA (h) Lentiviral Particles: sc-96468-V.

Molecular Weight of NDUFC2: 15 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.