SANTA CRUZ BIOTECHNOLOGY, INC.

NDUFC2 (G-12): sc-109589

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The Power to Question

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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8. Chin, S.F., et al. 2007. High-resolution aCGH and expression profiling identifies a novel genomic subtype of ER negative breast cancer. Genome Biol. 8: R215.
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CHROMOSOMAL LOCATION

Genetic locus: Ndufc2 (mouse) mapping to 7 E1.

SOURCE

NDUFC2 (G-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of NDUFC2 of mouse 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-109589 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

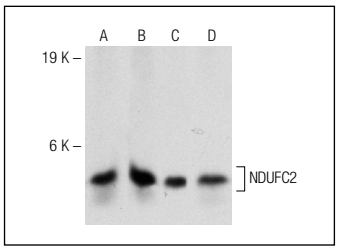
NDUFC2 (G-12) is recommended for detection of NDUFC2 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for NDUFC2 siRNA (m): sc-149887, NDUFC2 shRNA Plasmid (m): sc-149887-SH and NDUFC2 shRNA (m) Lentiviral Particles: sc-149887-V.

Molecular Weight of NDUFC2: 15 kDa.

Positive Controls: rat kidney extract: sc-2394, mouse brain extract: sc-2253 or rat liver extract: sc-2395.

DATA



NDUFC2 (G-12): sc-109589. Western blot analysis of NDUFC2 expression in rat kidney (**A**), mouse brain (**B**), rat liver (**C**) and mouse kidney (**D**) tissue extracts.

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.

MONOS Satisfaction Guaranteed

Try **NDUFC2 (G-9): sc-398719** or **NDUFC2 (B-4): sc-377285**, our highly recommended monoclonal alternatives to NDUFC2 (G-12).