SANTA CRUZ BIOTECHNOLOGY, INC.

NDUFA11 (K-13): sc-109968



BACKGROUND

NDUFA11 (NADH-ubiquinone oxidoreductase a subunit 11), also designated complex I-B14.7, is one of 45 subunits comprising complex I of the oxidative phosphorylation electron transport chain. The multi-subunit NADH:ubiquinone oxidoreductase (complex I) is the first enzyme complex in the electron transport chain of the mitochondria. Complex I deficiency is the most common respiratory chain defect, resulting in various combinations of cardiac, hepatic, and renal disorders. Through use of chaotropic agents, complex I can be separated into three different fractions: a flavoprotein fraction, a hydrophobic protein (HP) fraction and an iron-sulfur protein (IP) fraction. Mutation in the NDUFA11 gene leads to complex I deficiency presenting with infantile lactic acidemia or encephalocardiomyopathy.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: NDUFA11 (human) mapping to 19p13.3; Ndufa11 (mouse) mapping to 17 D.

SOURCE

NDUFA11 (K-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NDUFA11 of mouse origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-109968 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

NDUFA11 (K-13) is recommended for detection of NDUFA11 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).

NDUFA11 (K-13) is also recommended for detection of NDUFA11 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for NDUFA11 siRNA (h): sc-97254, NDUFA11 siRNA (m): sc-149868, NDUFA11 shRNA Plasmid (h): sc-97254-SH, NDUFA11 shRNA Plasmid (m): sc-149868-SH, NDUFA11 shRNA (h) Lentiviral Particles: sc-97254-V and NDUFA11 shRNA (m) Lentiviral Particles: sc-149868-V.

Molecular Weight of NDUFA11: 15/23 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) Immunofluo-rescence: use 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.