

# NDUFA2 (M-12): sc-107021

## BACKGROUND

NDUFA2 (NADH dehydrogenase (ubiquinone) 1 a subcomplex, 2, 8 kDa), also known as CD14 or B8, is a 99 amino acid protein that localizes to the inner mitochondrial membrane. NDUFA2 functions as an accessory subunit of the mitochondrial membrane respiratory chain NADH dehydrogenase complex I. Complex I plays an important role in the transfer of electrons from NADH to the respiratory chain, a process that is essential for cellular respiration. Mutations in the gene encoding NDUFA2 may disrupt the function of complex I and could be involved in the pathogenesis of Leigh syndrome, a rare neuro-metabolic disorder that is characterized by a loss of motor skills and, ultimately, death.

## REFERENCES

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- Loeffen, J.L., et al. 1998. cDNA of eight nuclear encoded subunits of NADH:ubiquinone oxidoreductase: human complex I cDNA characterization completed. *Biochem. Biophys. Res. Commun.* 253: 415-422.
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- Vogel, R.O., et al. 2007. Identification of mitochondrial complex I assembly intermediates by tracing tagged NDUF3 demonstrates the entry point of mitochondrial subunits. *J. Biol. Chem.* 282: 7582-7590.
- Hoefs, S.J., et al. 2008. NDUFA2 complex I mutation leads to Leigh disease. *Am. J. Hum. Genet.* 82: 1306-1315.
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## STORAGE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

## CHROMOSOMAL LOCATION

Genetic locus: Ndufa2 (mouse) mapping to 18 B2.

## SOURCE

NDUFA2 (M-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of NDUFA2 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-107021 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

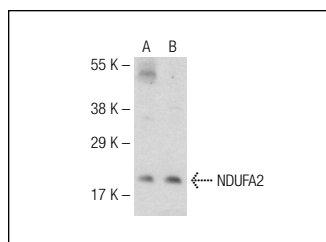
NDUFA2 (M-12) is recommended for detection of NDUFA2 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for NDUFA2 siRNA (m): sc-149870, NDUFA2 shRNA Plasmid (m): sc-149870-SH and NDUFA2 shRNA (m) Lentiviral Particles: sc-149870-V.

Molecular Weight of NDUFA2: 11 kDa.

Positive Controls: L8 cell lysate: sc-3807 or L6 whole cell lysate.

## DATA



NDUFA2 (M-12): sc-107021. Western blot analysis of NDUFA2 expression in L8 (A) and L6 (B) whole cell lysates.

## RESEARCH USE

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