

# NDUFS3 (H-68): sc-292169

## BACKGROUND

NDUFS3 (NADH dehydrogenase ubiquinone iron-sulfur protein 3) is one of about 45 subunits comprising complex I of the oxidative phosphorylation electron transport chain. The multisubunit NADH: ubiquinone oxidoreductase (complex I) is the first enzyme complex in the electron transport chain of the mitochondria. NDUFS3 is the last subunit of the seven subunits that make up the core of complex I. 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. The IP fraction includes NDUFS1-7. NDUFS3 contains a highly conserved casein kinase II phosphorylation site. Mutations in the NDUFS3 gene may cause optic atrophy, Leigh syndrome and complex I deficiency.

## CHROMOSOMAL LOCATION

Genetic locus: NDUFS3 (human) mapping to 11p11.2; (mouse) mapping to 2 E1.

## SOURCE

NDUFS3 (H-68) is a rabbit polyclonal antibody raised against amino acids 181-248 mapping within an internal region of NDUFS3 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.

## 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.

## APPLICATIONS

NDUFS3 (H-68) is recommended for detection of NDUFS3 of mouse, rat and human 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).

NDUFS3 (H-68) is also recommended for detection of NDUFS3 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for NDUFS3 siRNA (h): sc-75890, NDUFS3 siRNA (m): sc-75891, NDUFS3 shRNA Plasmid (h): sc-75890-SH, NDUFS3 shRNA Plasmid (m): sc-75891-SH, NDUFS3 shRNA (h) Lentiviral Particles: sc-75890-V and NDUFS3 shRNA (m) Lentiviral Particles: sc-75891-V.

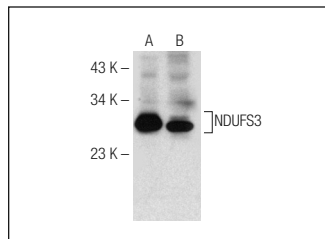
Molecular Weight of NDUFS3: 30 kDa.

Positive Controls: mouse heart extract: sc-2254 or human heart extract: sc-363763.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DAT



NDUFS3 (H-68): sc-292169. Western blot analysis of NDUFS3 expression in mouse heart (A) and human heart (B) tissue extracts.

## PROTOCOLS

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


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Try **NDUFS3 (D-4): sc-374282**, our highly recommended monoclonal alternative to NDUFS3 (H-68).