

# NDUFB7 (FL-137): sc-135318

## BACKGROUND

Complex 1 (also known as NADH dehydrogenase) of the electron transport chain (respiratory chain) is an enzymatic complex that catalyzes the transfer of electrons from NADH to ubiquinone. Free energy from the reaction is conserved in the transfer of protons into the intermembrane space to create an electrochemical proton gradient, a driving force for ATP synthesis. Complex 1 is a complicated, multi-protein, L-shaped complex composed of at least 45 different subunits and located in the mitochondrial inner membrane. NDUB7 (NADH dehydrogenase [ubiquinone] 1 $\beta$  subcomplex subunit 7), also known as NADH-ubiquinone oxidoreductase B18 subunit, complex I-B18 (CI-B18) or cell adhesion protein SQM1, is a 137 amino acid accessory subunit of complex 1. Ubiquitously expressed, NDUFB7 localizes to the mitochondrial inner membrane on the matrix side. NDUFB7 contains a sevenfold repeat of positively-charged residues that may indicate a role in protein-protein interactions.

## CHROMOSOMAL LOCATION

Genetic locus: NDUFB7 (human) mapping to 19p13.12; Ndufb7 (mouse) mapping to 8 C2.

## SOURCE

NDUFB7 (FL-137) is a rabbit polyclonal antibody raised against amino acids 1-137 representing full length NDUFB7 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g 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.

## APPLICATIONS

NDUFB7 (FL-137) is recommended for detection of NDUFB7 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

NDUFB7 (FL-137) is also recommended for detection of NDUFB7 in additional species, including bovine.

Suitable for use as control antibody for NDUFB7 siRNA (h): sc-97267, NDUFB7 siRNA (m): sc-149884, NDUFB7 shRNA Plasmid (h): sc-97267-SH, NDUFB7 shRNA Plasmid (m): sc-149884-SH, NDUFB7 shRNA (h) Lentiviral Particles: sc-97267-V and NDUFB7 shRNA (m) Lentiviral Particles: sc-149884-V.

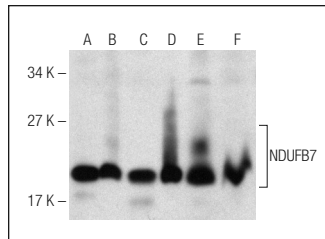
Molecular Weight of NDUFB7: 16 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201, HL-60 whole cell lysate: sc-2209 or PC-3 cell lysate: sc-2220.

## 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.

## DATA



NDUFB7 (FL-137): sc-135318. Western blot analysis of NDUFB7 expression in A-431 (A), HL-60 (B), PC-3 (C) and Raji (D) whole cell lysates and rat brain (E) and mouse ovary (F) tissue extracts.

## RESEARCH USE

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

## PROTOCOLS

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



Try **NDUFB7 (F-8): sc-365552**, our highly recommended monoclonal alternative to NDUFB7 (FL-137).