

# NDUFA7 (P-12): sc-131630

## BACKGROUND

NDUFA7 (NADH dehydrogenase (ubiquinone) 1  $\alpha$  subcomplex, 7) is a 113 amino acid protein that localizes to both the inner mitochondrial membrane and to the matrix side of the peripheral membrane and belongs to the complex I NDUFA7 subunit family. Existing as a subunit of the multi-protein membrane respiratory chain NADH dehydrogenase complex (Complex I), NDUFA7 functions as an accessory protein that facilitates the transfer of electrons from NADH to the respiratory chain. Human NDUFA7 shares 89% sequence identity with its bovine counterpart, suggesting a conserved role between species. The gene encoding NDUFA7 maps to human chromosome 19, which consists of over 63 million bases, houses approximately 1,400 genes and is recognized for having the greatest gene density of the human chromosomes.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: NDUFA7 (human) mapping to 19p13.2; Ndufa7 (mouse) mapping to 17 B1.

## SOURCE

NDUFA7 (P-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NDUFA7 of human origin.

## RESEARCH USE

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

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-131630 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

NDUFA7 (P-12) is recommended for detection of NDUFA7 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); non cross-reactive with other NUDFA family members.

NDUFA7 (P-12) is also recommended for detection of NDUFA7 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for NDUFA7 siRNA (h): sc-97553, NDUFA7 siRNA (m): sc-149874, NDUFA7 shRNA Plasmid (h): sc-97553-SH, NDUFA7 shRNA Plasmid (m): sc-149874-SH, NDUFA7 shRNA (h) Lentiviral Particles: sc-97553-V and NDUFA7 shRNA (m) Lentiviral Particles: sc-149874-V.

Molecular Weight of NDUFA7: 13 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> 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.

## PROTOCOLS

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