

# NDUFA4 (N-14): sc-131628

## BACKGROUND

NDUFA4 (NADH dehydrogenase (ubiquinone) 1  $\alpha$  subcomplex, 4), also known as MLRQ, is an 81 amino acid protein that localizes to the matrix side of the inner mitochondrial membrane and belongs to the complex I NDUFA4 subunit family. Existing as a subunit of the multi-protein membrane respiratory chain NADH dehydrogenase complex (Complex I), NDUFA4 functions as an accessory protein that facilitates the transfer of electrons from NADH to the respiratory chain. The gene encoding NDUFA7 maps to human chromosome 7, which houses over 1,000 genes and comprises nearly 5% of the human genome. Defects in some of the genes localized to chromosome 7 have been linked to osteogenesis imperfecta, Williams-Beuren syndrome, Pendred syndrome, lissencephaly, citrullinemia and Shwachman-Diamond syndrome.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: NDUFA4 (human) mapping to 7p21.3; Ndufa4 (mouse) mapping to 6 A1.

## SOURCE

NDUFA4 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of NDUFA4 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.

Blocking peptide available for competition studies, sc-131628 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

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

## APPLICATIONS

NDUFA4 (N-14) is recommended for detection of NDUFA4 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 NDUFA family members.

NDUFA4 (N-14) is also recommended for detection of NDUFA4 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for NDUFA4 siRNA (h): sc-89744, NDUFA4 siRNA (m): sc-106286, NDUFA4 shRNA Plasmid (h): sc-89744-SH, NDUFA4 shRNA Plasmid (m): sc-106286-SH, NDUFA4 shRNA (h) Lentiviral Particles: sc-89744-V and NDUFA4 shRNA (m) Lentiviral Particles: sc-106286-V.

Molecular Weight of NDUFA4: 9 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.


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Try **NDUFA4 (2G7): sc-517091**, our highly recommended monoclonal alternative to NDUFA4 (N-14).