



# NDUFAF1 (Y-12): sc-104437

## BACKGROUND

NDUFAF1 (NADH dehydrogenase (ubiquinone) 1  $\alpha$  subcomplex assembly factor 1), also known as CIA30 (Complex I intermediate-associated protein 30, mitochondrial) or CGI-65, is a 327 amino acid mitochondrial protein that is ubiquitously expressed and belongs to the CIA30 family. The largest multi-protein enzyme of the oxidative phosphorylation (OXPHOS) system, NDUFAF1 functions as a chaperone protein that is involved in the assembly of the mitochondrial NADH ubiquinone oxidoreductase 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. NDUFAF1 is a crucial component in the early assembly of complex I and mutations in its gene can cause mitochondrial disease.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: NDUFAF1 (human) mapping to 15q15.1; Ndufaf1 (mouse) mapping to 2 E5.

## SOURCE

NDUFAF1 (Y-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NDUFAF1 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-104437 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## 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.

## PROTOCOLS

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

## APPLICATIONS

NDUFAF1 (Y-12) is recommended for detection of NDUFAF1 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 NDUF family members.

Suitable for use as control antibody for NDUFAF1 siRNA (h): sc-90256, NDUFAF1 siRNA (m): sc-106288, NDUFAF1 shRNA Plasmid (h): sc-90256-SH, NDUFAF1 shRNA Plasmid (m): sc-106288-SH, NDUFAF1 shRNA (h) Lentiviral Particles: sc-90256-V and NDUFAF1 shRNA (m) Lentiviral Particles: sc-106288-V.

Molecular Weight of NDUFAF1: 38 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™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) 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™ Mounting Medium: sc-24941.