

NDOR1 (G-15): sc-160574

BACKGROUND

NDOR1 (NADPH dependent diflavin oxidoreductase 1), also known as NR1 (novel reductase 1), is a 597 amino acid cytoplasmic protein that contains one FAD-binding domain and one flavodoxin-like domain. Expressed at low levels in heart, brain, kidney, pancreas, prostate and skeletal muscle and at particularly high levels in placenta, NDOR1 functions as an oxidoreductase that uses FAD and FMN as cofactors to catalyze the NADP-dependent reduction of one-electron acceptors, such as cytochrome c, menadione and potassium ferricyanide. NDOR1 is present in a variety of cancer cell lines, including lung carcinoma, melanoma G361, promyelocytic leukemia, HeLa S3, chronic myelogenous leukemia, lymphoblastic leukemia, Burkitt's lymphoma and colorectal adenocarcinoma, suggesting a potent role in tumorigenesis. Two isoforms of NDOR1 are expressed due to alternative splicing events.

REFERENCES

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- Kwasnicka, D.A., et al. 2003. Coordinate expression of NADPH-dependent flavin reductase, Fre-1, and Hint-related 7meGMP-directed hydrolase, DCS-1. *J. Biol. Chem.* 278: 39051-39058.
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CHROMOSOMAL LOCATION

Genetic locus: NDOR1 (human) mapping to 9q34.3; Ndor1 (mouse) mapping to 2 A3.

SOURCE

NDOR1 (G-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NDOR1 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.

Blocking peptide available for competition studies, sc-160574 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

NDOR1 (G-15) is recommended for detection of NDOR1 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).

NDOR1 (G-15) is also recommended for detection of NDOR1 in additional species, including canine and avian.

Suitable for use as control antibody for NDOR1 siRNA (h): sc-92596, NDOR1 siRNA (m): sc-149864, NDOR1 shRNA Plasmid (h): sc-92596-SH, NDOR1 shRNA Plasmid (m): sc-149864-SH, NDOR1 shRNA (h) Lentiviral Particles: sc-92596-V and NDOR1 shRNA (m) Lentiviral Particles: sc-149864-V.

Molecular Weight of NDOR1: 67 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

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.

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 or our catalog for detailed protocols and support products.