NDR1 (G-15): sc-46182



The Power to Question

BACKGROUND

The nuclear Dbf2-related kinases (NDR1 and NDR2) participate in the regulation of cell division and morphology, and may be implicated in tumor progression. NDR1 and NDR-2 share 86% amino acid identity, but differ in their expression pattern. NDR1 localizes to the nucleus, while NDR2 exhibits punctate cytoplasmic distribution. Also, NDR1 expression appears highest in spleen, lung and thymus, whereas NDR2 shows highest expression in the gastrointestinal tract. However, both NDR1 and NDR2 are regulated by phosphorylation and the by the Ca²⁺-binding protein S100B. NDR1 and NDR2 may also play a role in the HIV-1 life cycle. Both proteins are cleaved by the HIV-1 protease (PR), which inhibits their enzymatic activity and alters the subcellular localization of NDR2. The genes encoding human NDR1 and NDR2 map to chromosomes 6p21.31 and 12p11.23, respectively.

CHROMOSOMAL LOCATION

Genetic locus: STK38 (human) mapping to 6p21.31; Stk38 (mouse) mapping to 17 A3.3.

SOURCE

NDR1 (G-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NDR1 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-46182 P, (100 μ 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.

APPLICATIONS

NDR1 (G-15) is recommended for detection of NDR1 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

NDR1 (G-15) is also recommended for detection of NDR1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for NDR1 siRNA (h): sc-44366, NDR1 siRNA (m): sc-44367, NDR1 shRNA Plasmid (h): sc-44366-SH, NDR1 shRNA Plasmid (m): sc-44367-SH, NDR1 shRNA (h) Lentiviral Particles: sc-44366-V and NDR1 shRNA (m) Lentiviral Particles: sc-44367-V.

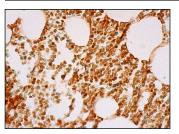
Molecular Weight of NDR1: 54 kDa.

Positive Controls: HeLa nuclear extract: sc-2120 or Jurkat nuclear extract: sc-2132.

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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



NDR1 (G-15): sc-46182. Immunoperoxidase staining of formalin fixed, paraffin-embedded human bone marrow tissue showing nuclear and cytoplasmic staining of hematopoietic cells.

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.



Try NDR1 (A-8): sc-365555 or NDR1 (YJ-7): sc-100404, our highly recommended monoclonal alternatives to NDR1 (G-15).

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