

# NDRG3 (N-20): sc-19470



The Power to Question

## BACKGROUND

The N-myc downstream regulated gene (NDRG) family is comprised of four members, NDRG1 (also designated Drg1, RTP, rit42, Cap43 and Ndr1), NDRG2, NDRG3 and NDRG4, which share 57-65% homology. The NDRG1 gene, which maps to human chromosome 8q24.3, is evolutionarily conserved and is similarly regulated in humans, mice and rats. Like NDRG2 and NDRG3, NDRG1 is ubiquitously expressed, but it is expressed most prominently in placental membranes and prostate, kidney, small intestine and ovary tissue. NDRG1 gene expression is induced by several compounds, including nickel, and produces a protein involved in stress responses, hormone responses, cell growth and differentiation. The gene encoding NDRG3 maps to human chromosome 20q11.23 and is predominantly expressed in testis, prostate and ovary, which suggests it may play a role in spermatogenesis.

## CHROMOSOMAL LOCATION

Genetic locus: NDRG3 (human) mapping to 20q11.23; Ndr3 (mouse) mapping to 2 H1.

## SOURCE

NDRG3 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of NDRG3 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-19470 P, (100 µg 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

NDRG3 (N-20) is recommended for detection of NDRG3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

NDRG3 (N-20) is also recommended for detection of NDRG3 in additional species, including equine, bovine and avian.

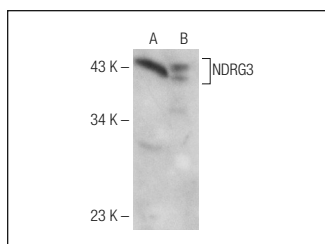
Suitable for use as control antibody for NDRG3 siRNA (h): sc-40759, NDRG3 siRNA (m): sc-40760, NDRG3 shRNA Plasmid (h): sc-40759-SH, NDRG3 shRNA Plasmid (m): sc-40760-SH, NDRG3 shRNA (h) Lentiviral Particles: sc-40759-V and NDRG3 shRNA (m) Lentiviral Particles: sc-40760-V.

Positive Controls: Raji whole cell lysate: sc-364236 or A549 cell lysate: sc-2413.

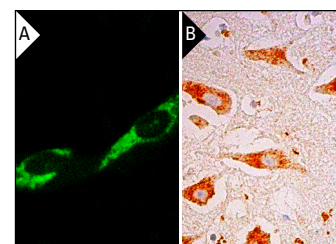
## RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA



NDRG3 (N-20): sc-19470. Western blot analysis of NDRG3 expression in Raji (A) and A549 (B) whole cell lysates.



NDRG3 (N-20): sc-19470. Immunofluorescence staining of methanol-fixed SK-N-SH cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human hippocampus tissue showing cytoplasmic staining of neuronal cells and glial cells (B).

## SELECT PRODUCT CITATIONS

1. Wang, W., et al. 2009. NDRG3 is an androgen regulated and prostate enriched gene that promotes *in vitro* and *in vivo* prostate cancer cell growth. *Int. J. Cancer* 124: 521-530.

## 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.



Try **NDRG3 (H-11): sc-514561**, our highly recommended monoclonal alternative to NDRG3 (N-20).