**NDRG3 (H-11): sc-514561**

**BACKGROUND**

The N-Myc downstream regulated gene (NDRG) family is comprised of four members, NDRG1 (also designated Drg1, RTP, rt42, 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, which is 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.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: NDRG3 (human) mapping to 20q11.23; Ndrg3 (mouse) mapping to 2 H1.

**SOURCE**

NDRG3 (H-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 2-26 at the N-terminus of NDRG3 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG κ kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

NDRG3 (H-11) is available conjugated to agarose (sc-514561 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514561 HRP), 200 µg/ml, for WB, (HCP) and ELISA; to either phycocerythrin (sc-514561 PE), fluorescein (sc-514561 FITC), Alexa Fluor® 488 (sc-514561 AF488), Alexa Fluor® 546 (sc-514561 AF546), Alexa Fluor® 594 (sc-514561 AF594) or Alexa Fluor® 647 (sc-514561 AF647), 200 µg/ml, for WB (RGB), IF, HCP and FCM; and to either Alexa Fluor® 680 (sc-514561 AF680) or Alexa Fluor® 790 (sc-514561 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-514561 P (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

**APPLICATIONS**

NDRG3 (H-11) is recommended for detection of NDRG3 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for NDRG3 siRNA (h): sc-40759, NDRG3 siRNA (m): sc-40780, 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: LNCaP cell lysate: sc-2231, Raji whole cell lysate: sc-364236 or HeLa whole cell lysate: sc-2200.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker Molecular Weight Standards: sc-2035, UltraCruz Blocking Reagent: sc-516214 and Western Blotting Luminal Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).


**DATA**

**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 for detailed protocols and support products.

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