**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, 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; kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

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-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:100-1:1000), 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).

**DATA**

NDRG3 (H-11): sc-514561. Western blot analysis of NDRG3 expression in Raji (A), LNCaP (B), K-562 (C), HeLa (D) and Jurkat (E) whole cell lysates.

NDRG3 (H-11): sc-514561. Western blot analysis of NDRG3 expression in Raji (A) and 3T3-L1 (B) whole cell lysates.

**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 website at www.scbt.com or for detailed protocols and support products.