BACKGROUND

Nur77 (also designated NGF-B), Nurr1 (Nur-related factor 1) and NOR-1 (neuron-derived orphan receptor-1) constitute the NGFI-B subfamily within the nuclear receptor superfamily. Ligands for these proteins have not been identified, and, therefore, they are designated “orphan nuclear receptors.” Genes of the NGFI-B subfamily are classified as immediate-early genes, which are induced rapidly, but transiently, in response to a variety of stimuli. They have been implicated in cell proliferation, differentiation and apoptosis. The human NOR-1 gene maps to chromosome 9q and encodes a protein which is expressed in heart, skeletal muscle, thymus and spleen as well as in brain, where it is developmentally regulated. Therefore, NOR-1 may be involved in regulating neural differentiation. The NOR-1 gene also undergoes chromosomal translocation with the EWS gene to produce a protein thought to affect pre-mRNA splicing.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: NR4A3 (human) mapping to 9q31.1; Nr4a3 (mouse) mapping to 4 B1.

SOURCE

NOR-1 (Q-25) is an affinity purified rabbit polyclonal antibody raised against synthetic NOR-1 peptide of human origin.

PRODUCT

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

NOR-1 (Q-25) is recommended for detection of NOR-1 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for NOR-1 siRNA (h): sc-38842, NOR-1 siRNA (m): sc-38843, NOR-1 shRNA Plasmid (h): sc-38842-SH, NOR-1 shRNA Plasmid (m): sc-38843-SH, NOR-1 shRNA (h) Lentiviral Particles: sc-38842-V and NOR-1 shRNA (m) Lentiviral Particles: sc-38843-V.

Molecular Weight of NOR-1: 68 kDa.

Positive Controls: HeLa nuclear extract: sc-2120 or Hep G2 cell lysate: sc-2227.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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).

DATA

NOR-1 (Q-25): sc-133840. Western blot analysis of NOR-1 expression in Hep G2 whole cell lysate.

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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.