SANTA CRUZ BIOTECHNOLOGY, INC.

NOR-1 (Q-25): sc-133840

BACKGROUND

Nur77 (also designated NGFI-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

1. Ohkura, N., et al. 1996. Structure, mapping and expression of a human NOR-1 gene, the third member of the Nur77/NGFI-B family. Biochim. Biophys. Acta 1308: 205-214.
2. Ohkura, N., et al. 1996. Antisense oligonucleotide to NOR-1, a novel orphan nuclear receptor, induces migration and neurite extension of cultured forebrain cells. Brain Res. Mol. Brain Res. 35: 309-313.

CHROMOSOMAL LOCATION

Genetic locus: NR4A3 (human) mapping to 9q22.33; 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.

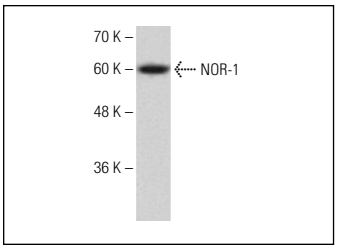
Molecular Weight of NOR-1: 68 kDa.

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.

SELECT PRODUCT CITATIONS

1. Lappas, M. 2014. The NR4A receptors Nurr1 and Nur77 are increased in human placenta from women with gestational diabetes. Placenta 35: 866-875.
2. Lappas, M. 2014. Effect of spontaneous term labour on the expression of the NR4A receptors nuclear receptor related 1 protein (Nurr1), neuron-derived clone 77 (Nur77) and neuron-derived orphan receptor 1 (NOR1) in human fetal membranes and myometrium. Reprod. Fertil. Dev. E-Published.

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 our catalog for detailed protocols and support products.