

NOR-1 (F-10): sc-393903

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 protein 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 9q22.33, 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

- 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.
- 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.
- Maruyama, K., et al. 1997. Expression of the putative transcription factor NOR-1 in the nervous, the endocrine and the immune systems and the developing brain of the rat. *Neuroendocrinology* 65: 2-8.
- Maruyama, K., et al. 1998. The NGFI-B subfamily of the nuclear receptor superfamily (review). *Int. J. Oncol.* 12: 1237-1243.
- Ohkura, N., et al. 1998. Alternative splicing generates isoforms of human neuron-derived orphan receptor-1 (NOR-1) mRNA. *Gene* 211: 79-85.
- 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 (F-10) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 227-262 within an internal region of NOR-1 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-393903 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-393903 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

NOR-1 (F-10) is recommended for detection of NOR-1 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).

NOR-1 (F-10) is also recommended for detection of NOR-1 in additional species, including porcine.

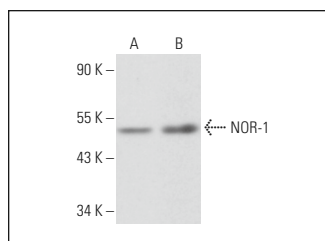
Suitable for use as control antibody for NOR-1 siRNA (h): sc-38842, NOR-1 siRNA (m): sc-38843, NOR-1 shRNA Plasmid (h): sc-38842-SH, NOR-1 shRNA Plasmid (m): sc-38843-SH, NOR-1 shRNA (h) Lentiviral Particles: sc-38842-V and NOR-1 shRNA (m) Lentiviral Particles: sc-38843-V.

NOR-1 (F-10) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

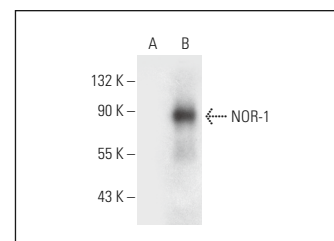
Molecular Weight of NOR-1: 68 kDa.

Positive Controls: NOR-1 (m): 293 Lysate: sc-179018, U-698-M whole cell lysate: sc-364799 or rat hippocampus tissue extract.

DATA



NOR-1 (F-10): sc-393903. Western blot analysis of NOR-1 expression in U-698-M whole cell lysate (A) and rat hippocampus tissue extract (B).



NOR-1 (F-10): sc-393903. Western blot analysis of NOR-1 expression in non-transfected (A) and mouse NOR-1 transfected: sc-110760 (B) 293 whole cell lysates.

SELECT PRODUCT CITATIONS

- Mey, J.T., et al. 2019. Skeletal muscle Nur77 and NOR1 Insulin responsiveness is blunted in obesity and type 2 diabetes but improved after exercise training. *Physiol. Rep.* 7: e14042.

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 for detailed protocols and support products.