

Nur77 (N-19): sc-7014

BACKGROUND

Nurr1 (Nur-related factor 1) and Nur77 (also designated NGFI-B) encode orphan nuclear receptors which may comprise an additional subfamily within the nuclear receptor superfamily. The rat and human homologs of mouse Nurr1 are designated RNR1 and NOT, respectively. Both Nurr1 and Nur77 are growth factor inducible immediate early response genes. Induction of both Nurr1 and Nur77 is seen after membrane depolarization while only Nur77 induction is seen with NGF stimulation. JunD acts as a mediator for Nur77. An increase in Nur77 expression is seen in activated T cells during G₀ to G₁ transition and throughout the G₁ phase. In addition to its function as an immediate early gene, Nur77 may play a role in TCR-mediated apoptosis. Cyclosporin A, a potent immunosuppressant, has been shown to inhibit the ability of Nur77 to bind DNA. A dominant negative form of Nur77 can protect T cell hybridomas from activation-induced apoptosis. However, the absolute requirement of Nur77 for TCR-mediated apoptosis is still under debate.

CHROMOSOMAL LOCATION

Genetic locus: NR4A1 (human) mapping to 12q13.13; Nr4a1 (mouse) mapping to 15 F2.

SOURCE

Nur77 (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Nur77 of human origin.

PRODUCT

Each vial contains 200 µg IgG 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-7014 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-7014 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Nur77 (N-19) is recommended for detection of Nur77 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)], 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).

Nur77 (N-19) is also recommended for detection of Nur77 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for Nur77 siRNA (h): sc-36109, Nur77 siRNA (m): sc-36110, Nur77 shRNA Plasmid (h): sc-36109-SH, Nur77 shRNA Plasmid (m): sc-36110-SH, Nur77 shRNA (h) Lentiviral Particles: sc-36109-V and Nur77 shRNA (m) Lentiviral Particles: sc-36110-V.

Nur77 (N-19) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

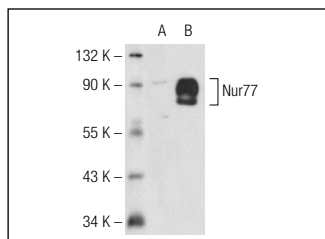
Molecular Weight of Nur77: 64 kDa.

Positive Controls: Nur77 (h2): 293 Lysate: sc-112240.

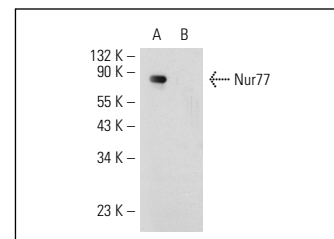
STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



Nur77 (N-19): sc-7014. Western blot analysis of human Nur77 expression in non-transfected: sc-117752 (A) and human Nur77 transfected: sc-110000 (B) 293T whole cell lysates.



Nur77 (N-19): sc-7014. Western blot analysis of Nur77 expression in human Nur77 transfected: sc-112240 (A) and non-transfected: sc-110760 (B) 293 whole cell lysates.

SELECT PRODUCT CITATIONS

1. Maira, M., et al. 1999. Heterodimerization between members of the Nur subfamily of orphan nuclear receptors as a novel mechanism for gene activation. *Mol. Cell. Biol.* 19: 7549-7557.
2. Shao, H., et al. 1999. Slow accumulation of active mitogen-activated protein kinase during thymocyte differentiation regulates the temporal pattern of transcription factor gene expression. *J. Immunol.* 163: 603-610.
3. Kelly, S.N., et al. 2004. Modulation of steroidogenic enzymes by orphan nuclear transcriptional regulation may control diverse production of cortisol and androgens in the human adrenal. *J. Endocrinol.* 181: 355-365.
4. Kelly, S.N., et al. 2005. Coregulatory protein— orphan nuclear receptor interactions in the human adrenal cortex. *J. Endocrinol.* 186: 33-42.
5. Martens, C., et al. 2005. Protein-protein interactions and transcriptional antagonism between the subfamily of NGFI-B/Nur77 orphan nuclear receptors and glucocorticoid receptor. *Mol. Endocrinol.* 19: 885-897.
6. Lee, J.H., et al. 2009. Interleukin 17 (IL-17) increases the expression of Toll-like receptor-2, 4, and 9 by increasing IL-1β and IL-6 production in autoimmune arthritis. *J. Rheumatol.* 36: 684-692.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

MONOS
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Try **Nur77 (C-5): sc-365113** or **Nur77 (E-6): sc-166166**, our highly recommended monoclonal alternatives to Nur77 (N-19). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **Nur77 (C-5): sc-365113**.