SANTA CRUZ BIOTECHNOLOGY, INC.

Nurr1 (M-196): sc-5568

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 G_0 to G_1 transition and throughout the G_1 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: NR4A2 (human) mapping to 2q24.1; Nr4a2 (mouse) mapping to 2 C1.1.

SOURCE

Nurr1 (M-196) is a rabbit polyclonal antibody raised against amino acids 66-262 of Nurr1 of mouse 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-5568 X, 200 µg/0.1 ml.

APPLICATIONS

Nurr1 (M-196) is recommended for detection of Nurr1 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).

Nurr1 (M-196) is also recommended for detection of Nurr1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Nurr1 siRNA (h): sc-36111, Nurr1 siRNA (m): sc-36112, Nurr1 shRNA Plasmid (h): sc-36111-SH, Nurr1 shRNA Plasmid (m): sc-36112-SH, Nurr1 shRNA (h) Lentiviral Particles: sc-36111-V and Nurr1 shRNA (m) Lentiviral Particles: sc-36112-V.

Nurr1 (M-196) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

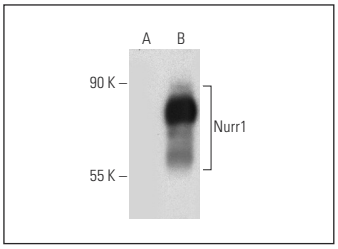
Molecular Weight of Nurr1: 66 kDa.

Positive Controls: Nurr1 (h): 293T Lysate: sc-158785, SK-N-MC cell lysate: sc-2237 or SW-13 cell lysate: sc-24778.

STORAGE

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

DATA



Nurr1 (M-196): sc-5568. Western blot analysis of Nurr1 expression in non-transfected: sc-117752 (**A**) and human Nurr1 transfected: sc-158785 (**B**) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Satoh, J., et al. 2002. The constitutive and inducible expression of Nurr1, a key regulator of dopaminergic neuronal differentiation, in human neural and non-neural cell lines. Neuropathology 22: 219-232.
2. Wu, E., et al. 2008. Comprehensive dissection of PDGF-PDGFR signaling pathways in PDGFR genetically defined cells. PLoS ONE 3: e3794.
3. Lammi, J., et al. 2008. Corepressor interaction differentiates the permissive and non-permissive retinoid X receptor heterodimers. Arch. Biochem. Biophys. 472: 105-114.
4. Briand, O., et al. 2012. The nuclear orphan receptor Nur77 is a lipotoxicity sensor regulating glucose-induced Insulin secretion in pancreatic β-cells. Mol. Endocrinol. 26: 399-413.
5. Baron, O., et al. 2012. Cooperation of nuclear fibroblast growth factor receptor 1 and Nurr1 offers new interactive mechanism in postmitotic development of mesencephalic dopaminergic neurons. J. Biol. Chem. 287: 19827-19840.
6. Lee, Y.W., et al. 2013. NGF-induced cell differentiation and gene activation is mediated by integrative nuclear FGFR1 signaling (INFS). PLoS ONE: e68931.

RESEARCH USE

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