

# NKX1-1 (P-21): sc-133831

## BACKGROUND

The homeobox DNA-binding domain is a 60 amino acid motif that is conserved among many species and functions to bind DNA via a helix-turn-helix structure, thereby playing a role in transcriptional regulation and the control of gene expression. NKX1-1 (NK1 transcription factor-related protein 1), also known as HPX153 (homeobox protein 153), is a 411 amino acid nuclear protein that is expressed in progenitor cells and contains one homeobox DNA-binding domain, suggesting a role in transcriptional regulation. The gene encoding NKX1-1 maps to human chromosome 4, which encodes nearly 6% of the human genome and has the largest gene deserts (regions of the genome with no protein encoding genes) of all of the human chromosomes. Defects in some of the genes located on chromosome 4 are associated with Huntington's disease, Ellis-van Creveld syndrome, methylmalonic acidemia and polycystic kidney disease.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: NKX1-1 (human) mapping to 4p16.3; Nkx1-1 (mouse) mapping to 5 B1.

## SOURCE

NKX1-1 (P-21) is a Protein A purified rabbit polyclonal antibody raised against synthetic NKX1-1 peptide of mouse origin.

## RESEARCH USE

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

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

## APPLICATIONS

NKX1-1 (P-21) is recommended for detection of NKX1-1 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 NKX1-1 siRNA (h): sc-89254, NKX1-1 siRNA (m): sc-148953, NKX1-1 shRNA Plasmid (h): sc-89254-SH, NKX1-1 shRNA Plasmid (m): sc-148953-SH, NKX1-1 shRNA (h) Lentiviral Particles: sc-89254-V and NKX1-1 shRNA (m) Lentiviral Particles: sc-148953-V.

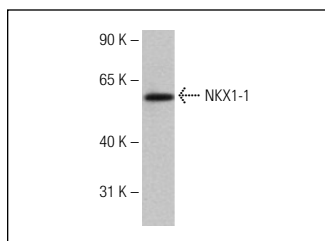
Molecular Weight of NKX1-1: 41 kDa.

Positive Controls: SP2/0 whole cell lysate.

## 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



NKX1-1 (P-21): sc-133831. Western blot analysis of NKX1-1 expression in SP2/0 whole cell lysate.

## STORAGE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.