

NKX1-2 (N-16): sc-163150

BACKGROUND

NKX1-2 (NK1 transcription factor-related protein 2), also known as NKX-1.1, is a 310 amino acid nuclear protein that belongs to the NK-1 homeobox family and contains one homeobox DNA-binding domain. Acting in the CNS, NKX1-2 may be involved in cell specification. The gene that encodes NKX1-2 consists of approximately 2,553 bases and maps to human chromosome 10q26.13. Spanning nearly 135 million base pairs and encoding nearly 1,200 genes, chromosome 10 makes up approximately 4.5% of the human genome. Defects in some of the genes that map to chromosome 10 are associated with Charcot-Marie Tooth disease, Jackson-Weiss syndrome, Usher syndrome, nonsyndromic deafness, Wolman's syndrome, Cowden syndrome, multiple endocrine neoplasia type 2 and porphyria.

REFERENCES

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3. Rovescalli, A.C., et al. 2000. The mouse Nkx-1.2 homeobox gene: alternative RNA splicing at canonical and noncanonical splice sites. *Proc. Natl. Acad. Sci. USA* 97: 1982-1987.
4. Berger, P., et al. 2002. Molecular cell biology of Charcot-Marie-Tooth disease. *Neurogenetics* 4: 1-15.
5. Teresi, R.E., et al. 2007. Cowden syndrome-affected patients with PTEN promoter mutations demonstrate abnormal protein translation. *Am. J. Hum. Genet.* 81: 756-767.
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CHROMOSOMAL LOCATION

Genetic locus: NKX1-2 (human) mapping to 10q26.13; Nkx1-2 (mouse) mapping to 7 F3.

SOURCE

NKX1-2 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of NKX1-2 of human origin.

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.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-163150 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-163150 X, 200 µg/0.1 ml.

APPLICATIONS

NKX1-2 (N-16) is recommended for detection of NKX1-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with NKX1-1.

NKX1-2 (N-16) is also recommended for detection of NKX1-2 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for NKX1-2 siRNA (h): sc-90717, Nkx-1.2 siRNA (m): sc-150002, NKX1-2 shRNA Plasmid (h): sc-90717-SH, Nkx-1.2 shRNA Plasmid (m): sc-150002-SH, NKX1-2 shRNA (h) Lentiviral Particles: sc-90717-V and Nkx-1.2 shRNA (m) Lentiviral Particles: sc-150002-V.

NKX1-2 (N-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of NKX1-2: 32 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.