

Nkx-2.3 (O-21): sc-133826

BACKGROUND

Nkx homeodomain proteins are members of a large family of vertebrate transcription factors that have a strong homology to the NK genes in *Drosophila*. Nkx proteins are involved in several aspects of cell type specification and maintenance of differentiated tissue functions. Nkx-2.3 contains a homeobox, a conserved NK2 domain, a C-terminal GIRAW motif and an N-terminal homology domain that is conserved among all NK2 genes. Expression of Nkx-2.3 is activated later in differentiated myocardial cells, and the protein is primarily detected in gut mesoderm, distinct regions of the brachial arches, the tongue epithelium and some domains in the developing jaws. Nkx-2.3 is necessary to function as a transcriptional activator during the earliest stages of heart formation. Overexpression of Nkx-2.3 leads to an enlarged heart due to a thickening of the myocardium caused by an increase in the overall number of myocardial cells.

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CHROMOSOMAL LOCATION

Genetic locus: Nkx2-3 (mouse) mapping to 19 C3.

STORAGE

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

SOURCE

Nkx-2.3 (O-21) is a Protein A purified rabbit polyclonal antibody raised against synthetic Nkx-2.3 peptide of mouse origin.

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

Nkx-2.3 (O-21) is recommended for detection of Nkx-2.3 of mouse and rat 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 Nkx-2.3 siRNA (m): sc-38726, Nkx-2.3 shRNA Plasmid (m): sc-38726-SH and Nkx-2.3 shRNA (m) Lentiviral Particles: sc-38726-V.

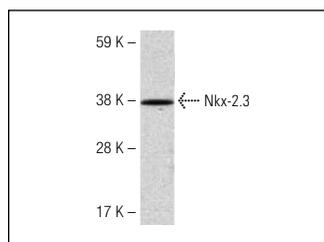
Molecular Weight of Nkx-2.3: 38 kDa.

Positive Controls: NCI-H226 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



Nkx-2.3 (O-21): sc-133826. Western blot analysis of Nkx-2.3 expression in NCI-H226 whole cell lysate.

RESEARCH USE

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

PROTOCOLS

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