



Nkx-2.8 (O-23): sc-133828

BACKGROUND

Members of the NK-2 family of homeodomain proteins, which include Nkx-2.2, Nkx-2.5, Nkx-2.6 and Nkx-2.8, are key regulators of growth and development in several tissues, including brain, heart and pancreas. Nkx-2.2 is responsible for directing ventral neuronal patterning in response to graded Shh signaling. Nkx-2.5, also designated cardiac specific homeobox protein (Csx), is a homolog of the *Drosophila* tinman protein and is essential for normal cardiovascular development. Nkx-2.6, also a homolog of the *Drosophila* tinman protein, is expressed in the caudal pharyngeal pouches, the caudal heart progenitors, the sinus venosus, the outflow tract of the heart and in a short segment of the gut between stages E8.5 and E10.5 of embryogenesis. Nkx-2.8, also designated NK-2 homolog H, NKX2H or Nkx-2.9, is a nuclear protein that contains one homeobox DNA-binding domain, indicating a possible role in development.

REFERENCES

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4. Sussel, L., Kalamaras, J., Hartigan-O'Connor, D.J., Meneses, J.J., Pedersen, R.A., Rubenstein, J.L. and German, M.S. 1998. Mice lacking the homeodomain transcription factor Nkx2.2 have diabetes due to arrested differentiation of pancreatic beta cells. *Development* 125: 2213-2221.
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6. Tian, J., Mahmood, R., Hnasko, R. and Locker, J. 2006. Loss of Nkx2.8 deregulates progenitor cells in the large airways and leads to dysplasia. *Cancer Res.* 66: 10399-10407.
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CHROMOSOMAL LOCATION

Genetic locus: NKX2-8 (human) mapping to 14q13.3; Nkx2-9 (mouse) mapping to 12 C1.

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.

SOURCE

Nkx-2.8 (O-23) is an affinity purified rabbit polyclonal antibody raised against synthetic Nkx-2.8 peptide of human origin.

PRODUCT

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

Nkx-2.8 (O-23) is recommended for detection of Nkx-2.8 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Nkx-2.8 siRNA (h): sc-75929, Nkx-2.8 siRNA (m): sc-75930, Nkx-2.8 shRNA Plasmid (h): sc-75929-SH, Nkx-2.8 shRNA Plasmid (m): sc-75930-SH, Nkx-2.8 shRNA (h) Lentiviral Particles: sc-75929-V and Nkx-2.8 shRNA (m) Lentiviral Particles: sc-75930-V.

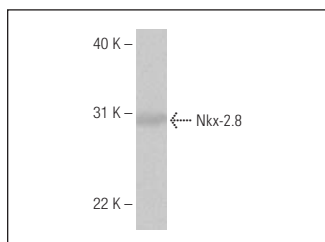
Molecular Weight of Nkx-2.8: 28 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

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.

DATA



Nkx-2.8 (O-23): sc-133828. Western blot analysis of Nkx-2.8 expression in Hep G2 whole cell lysate.

PROTOCOLS

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