

Barx1 (H-55): sc-99053

BACKGROUND

The BAR homeobox (Barx) family of proteins comprise Barx1 and Barx2. These proteins are regulators of place-dependent morphogenesis and play important roles in controlling the expression patterns of cell adhesion molecules. Barx1, a 226 amino acid nuclear protein, is expressed primarily in testis, heart and craniofacial tissue. Barx1 is a homeodomain transcription factor important in odontogenesis, craniofacial development and stomach organogenesis. Barx1 controls mesenchymal cell expression of two secreted Wnt antagonists, sFRP-1 and sFRP-2, proteins that are important in the development of the gastric endoderm which occurs before the epithelial differentiation. During early stages of molar development, Barx1 directs the undetermined ectomesenchymal cells in the proximal region of the jaws to follow the pathway of multicuspoid tooth development. Fibroblast growth factor-8 (FGF8) stimulates Barx1 expression, while bone morphogenetic protein-4 (BMP4) inhibits Barx1 expression.

REFERENCES

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3. Gould, D.B. and Walter, M.A. 2000. Cloning, characterization, localization, and mutational screening of the human Barx1 gene. *Genomics* 68: 336-342.
4. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 603260. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
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CHROMOSOMAL LOCATION

Genetic locus: BARX1 (human) mapping to 9q22.32; Barx1 (mouse) mapping to 13 A5.

SOURCE

Barx1 (H-55) is a rabbit polyclonal antibody raised against amino acids 52-106 mapping within an internal region of Barx1 of human 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-99053 X, 200 µg/0.1 ml.

RESEARCH USE

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

APPLICATIONS

Barx1 (H-55) is recommended for detection of Barx1 isoform 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)], 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 Barx1 isoform 2.

Barx1 (H-55) is also recommended for detection of Barx1 isoform 1 in additional species, including canine, porcine and avian.

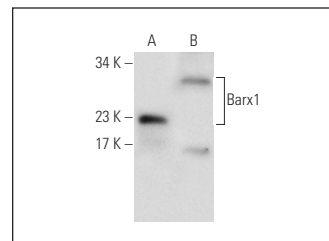
Suitable for use as control antibody for Barx1 siRNA (h): sc-60247, Barx1 siRNA (m): sc-60248, Barx1 shRNA Plasmid (h): sc-60247-SH, Barx1 shRNA Plasmid (m): sc-60248-SH, Barx1 shRNA (h) Lentiviral Particles: sc-60247-V and Barx1 shRNA (m) Lentiviral Particles: sc-60248-V.

Barx1 (H-55) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Barx1: 24 kDa.

Positive Controls: MIA PaCa-2 cell lysate: sc-2285, HeLa nuclear extract: sc-2120 or mouse pancreas extract: sc-364244.

DATA



Barx1 (H-55): sc-99053. Western blot analysis of Barx1 expression in mouse pancreas tissue extract (A) and MIA PaCa-2 whole cell lysate (B).

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 or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **Barx1 (392.8): sc-81956**, our highly recommended monoclonal alternative to Barx1 (H-55).