

Barx1 (H-14): sc-49379

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, sFRP1 and sFRP2, 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 multi-cuspid tooth development. Fibroblast growth factor-8 (FGF-8) stimulates Barx1 expression, while bone morphogenetic protein-4 (BMP-4) inhibits Barx1 expression.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: BARX1 (human) mapping to 9q12; Barx1 (mouse) mapping to 13 A5.

SOURCE

Barx1 (H-14) is an affinity purified goat polyclonal antibody raised against a peptide 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.

Blocking peptide available for competition studies, sc-49379 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-49379 X, 200 µg/0.1 ml.

APPLICATIONS

Barx1 (H-14) is recommended for detection of Barx1 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).

Suitable for use as control antibody for Barx1 siRNA (h): sc-60247 and Barx1 siRNA (m): sc-60248.

Barx1 (H-14) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Barx1: 24 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.

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.

PROTOCOLS

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