# Barx1 (h): 293T Lysate: sc-116949



The Power to Question

#### **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 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 multicuspid tooth development. Fibroblast growth factor-8 (FGF8) stimulates Barx1 expression, while bone morphogenetic protein-4 (BMP4) inhibits Barx1 expression.

### **REFERENCES**

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## **CHROMOSOMAL LOCATION**

Genetic locus: BARX1 (human) mapping to 9g22.32.

## **PRODUCT**

Barx1 (h): 293T Lysate represents a lysate of human Barx1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

#### **APPLICATIONS**

Barx1 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Barx1 antibodies. Recommended use: 10-20 µl per lane.

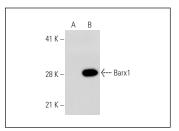
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Barx1 (392.8): sc-81956 is recommended as a positive control antibody for Western Blot analysis of enhanced human Barx1 expression in Barx1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

### **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

# **DATA**



Barx1 (392.8): sc-81956. Western blot analysis of Barx1 expression in non-transfected: sc-117752 (A) and human Barx1 transfected: sc-116949 (B) 293T whole cell Ivsates.

### **STORAGE**

Store at -20 $^{\circ}$  C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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 for detailed protocols and support products.

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