SANTA CRUZ BIOTECHNOLOGY, INC.

HoxD11 (H-89): sc-68885

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The Hox proteins are a family of transcription factors that play a role in development and cellular differentiation by regulating downstream target genes. Specifically, the Hox proteins direct DNA-protein and protein-protein interactions that assist in determining the morphologic features associated with the anterior-posterior body axis. Hox proteins are involved in controlling axial patterning, leukemias and hereditary malformations. HoxD11 (homeobox D11), also known as HOX4 or HOX4F, is a 338 amino acid protein that contains one homeobox DNA-binding domain and is a member of the Abd-B homeobox family. Localized to the nucleus, HoxD11 functions as a sequence-specific transcription factor that, in conjunction with a variety of other proteins, provides cells with positional identities on their anterior-posterior axis. Defects in the gene encoding HoxD11 are associated with severe limb and genital abnormalities, suggesting that HoxD11 plays an important role in forelimb morphogenesis.

REFERENCES

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2. Johnson, R.L. and Tabin, C.J. 1997. Molecular models for vertebrate limb development. Cell 90: 979-990.
3. Taketani, T., Taki, T., Shibuya, N., Ito, E., Kitazawa, J., Terui, K. and Hayashi, Y. 2002. The HoxD11 gene is fused to the NUP98 gene in acute myeloid leukemia with t(2;11)(q31;p15). Cancer Res. 62: 33-37.
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CHROMOSOMAL LOCATION

Genetic locus: HOXD11 (human) mapping to 2q31.1; Hoxd11 (mouse) mapping to 2 C3.

SOURCE

HoxD11 (H-89) is a rabbit polyclonal antibody raised against amino acids 209-269 mapping within an internal region of HoxD11 of human origin.

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.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-68885 X, 200 µg/0.1 ml.

APPLICATIONS

HoxD11 (H-89) is recommended for detection of HoxD11 of mouse 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).

Suitable for use as control antibody for HoxD11 siRNA (h): sc-75291, HoxD11 siRNA (m): sc-75292, HoxD11 shRNA Plasmid (h): sc-75291-SH, HoxD11 shRNA Plasmid (m): sc-75292-SH, HoxD11 shRNA (h) Lentiviral Particles: sc-75291-V and HoxD11 shRNA (m) Lentiviral Particles: sc-75292-V.

HoxD11 (H-89) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

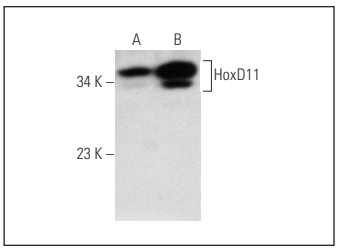
Molecular Weight of HoxD11: 36 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, SK-MEL-28 cell lysate: sc-2236 or LNCaP cell lysate: sc-2231.

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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



HoxD11 (H-89): sc-68885. Western blot analysis of HoxD11 expression in LNCaP (**A**) and SK-MEL-28 (**B**) whole cell lysates.

RESEARCH USE

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