SANTA CRUZ BIOTECHNOLOGY, INC.

HoxD11 (N-15): sc-82919



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 (home-obox 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.

CHROMOSOMAL LOCATION

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

SOURCE

HoxD11 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of HoxD11 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-82919 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HoxD11 (N-15) is recommended for detection of HoxD11 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 other Hox family members.

HoxD11 (N-15) is also recommended for detection of HoxD11 in additional species, including canine, bovine and porcine.

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 (N-15) 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 or HoxD11 (h): 293T Lysate: sc-174282.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



HoxD11 (N-15): sc-82919. Western blot analysis of HoxD11 expression in non-transfected: sc-117752 (A) and human HoxD11 transfected: sc-174282 (B) 293T whole cell lysates.

STORAGE

Store at 4° C, **D0 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.



Try **HoxD11 (R-26): sc-81969**, our highly recommended monoclonal alternative to HoxD11 (N-15).