

HoxD4 (A-25): sc-133675

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. HoxD4 (homeobox protein D4), also known as HOX4B, is a 255 amino acid protein that localizes to the nucleus and contains one homeobox DNA-binding domain. One of several members of the homeobox superfamily, HoxD4 functions as a sequence-specific transcription factor that is important for the correct positioning of developing limb buds on the anterior-posterior axis. Mutations in the gene encoding HoxD4 are associated with the pathogenesis of childhood acute lymphoblastic leukemia.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: HOXD4 (human) mapping to 2q31.1; Hoxd4 (mouse) mapping to 2 C3.

SOURCE

HoxD4 (A-25) is an affinity purified rabbit polyclonal antibody raised against synthetic HoxD4 peptide of human origin.

PRODUCT

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

HoxD4 (A-25) is recommended for detection of HoxD4 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

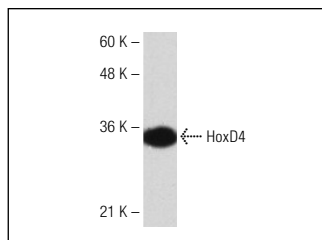
Suitable for use as control antibody for HoxD4 siRNA (h): sc-75295, HoxD4 siRNA (m): sc-75296, HoxD4 shRNA Plasmid (h): sc-75295-SH, HoxD4 shRNA Plasmid (m): sc-75296-SH, HoxD4 shRNA (h) Lentiviral Particles: sc-75295-V and HoxD4 shRNA (m) Lentiviral Particles: sc-75296-V.

Molecular Weight of HoxD4: 28 kDa.

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).

DATA



HoxD4 (A-25): sc-133675. Western blot analysis of human HoxD4 transfected 293T whole cell lysate.

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.