HoxD8 (Y-12): sc-137522



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. HoxD8 (homeobox D8), also known as HOX4E, is a 290 amino acid protein that localizes to the nucleus and contains one homeobox DNA-binding domain. One of several members of the homeobox superfamily, HoxD8 functions as a sequence-specific transcription factor that is important for the correct positioning of developing limb buds on the anterior-posterior axis.

CHROMOSOMAL LOCATION

Genetic locus: HOXD8 (human) mapping to 2q31.1; Hoxd8 (mouse) mapping to 2 C3.

SOURCE

HoxD8 (Y-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of HoxD8 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-137522 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

HoxD8 (Y-12) is recommended for detection of HoxD8 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 HoxD family members.

HoxD8 (Y-12) is also recommended for detection of HoxD8 in additional species, including bovine and porcine.

Suitable for use as control antibody for HoxD8 siRNA (h): sc-94725, HoxD8 siRNA (m): sc-146072, HoxD8 shRNA Plasmid (h): sc-94725-SH, HoxD8 shRNA Plasmid (m): sc-146072-SH, HoxD8 shRNA (h) Lentiviral Particles: sc-94725-V and HoxD8 shRNA (m) Lentiviral Particles: sc-146072-V.

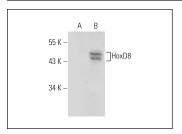
Molecular Weight of HoxD8: 32 kDa.

Positive Controls: HoxD8 (m): 293T Lysate: sc-178762.

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



HoxD8 (Y-12): sc-137522. Western blot analysis of HoxD8 expression in non-transfected: sc-117752 (A) and mouse HoxD8 transfected: sc-178762 (B) 293T whole cell lysates.

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 HoxD8 (E-11): sc-515357 or HoxD8 (3G8): sc-517116, our highly recommended monoclonal alternatives to HoxD8 (Y-12).

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