

HoxD3 (H-44): sc-28610

BACKGROUND

The Hox (homeobox) genes play an important role in the development and design of anterior-posterior body axes in animals. Although Hox proteins can bind to DNA as monomers, dimerization with PBX homeoproteins can significantly increase the DNA binding activity of these transcription factors. HoxD3, a homeobox transcription factor that promotes angiogenesis and collagen synthesis, is up-regulated during normal wound repair and may provide a means to directly improve collagen deposition, angiogenesis and closure in poorly healing wounds in diabetics. One study found that six of seven observed melanoma cell lines expressed the HoxD3 gene, whereas normal melanocytes did not. When overexpressed, HoxD3 upregulates Integrin $\beta 3$ expression in human erythroleukemia HEL cells and lung cancer A549 cells and enhances their motility and invasiveness. HoxD3 may also enhance the invasive and metastatic potential of cancer cells through TGF β -dependent and independent pathways.

CHROMOSOMAL LOCATION

Genetic locus: HOXD3 (human) mapping to 2q31.1; Hoxd3 (mouse) mapping to 2 C3.

SOURCE

HoxD3 (H-44) is a rabbit polyclonal antibody raised against amino acids 341-384 mapping within an internal region of HoxD3 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-28610 X, 200 μ g/0.1 ml.

APPLICATIONS

HoxD3 (H-44) is recommended for detection of HoxD3 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).

HoxD3 (H-44) is also recommended for detection of HoxD3 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for HoxD3 siRNA (h): sc-38698, HoxD3 siRNA (m): sc-38699, HoxD3 shRNA Plasmid (h): sc-38698-SH, HoxD3 shRNA Plasmid (m): sc-38699-SH, HoxD3 shRNA (h) Lentiviral Particles: sc-38698-V and HoxD3 shRNA (m) Lentiviral Particles: sc-38699-V.

HoxD3 (H-44) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

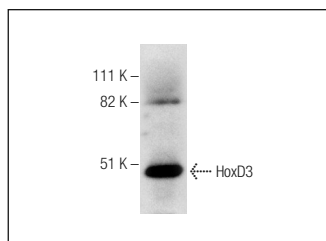
Molecular Weight of HoxD3: 44 kDa.

Positive Controls: A549 cell lysate: sc-2413 or human skeletal muscle extract: sc-363776.

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



HoxD3 (H-44): sc-28610. Western blot analysis of HoxD3 expression in human skeletal muscle tissue extract.

STORAGE

Store at 4° C, ****DO 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.

MONOS
Satisfaction
Guaranteed

Try **HoxD3 (4AY): sc-130378**, our highly recommended monoclonal alternative to HoxD3 (H-44).