# HoxD10 (V-20): sc-33004



The Power to Question

#### **BACKGROUND**

The Hox proteins 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. Homeobox protein HoxD10, also designated Hox-4D or Hox-4E, belongs to the Abd-B homeobox family of proteins. HoxD10 is a nuclear protein primarily expressed in the adult male and female urogenitcal tracts but also expressed in developing limb buds during development. Defects in the gene encoding for the HoxD10 protein cause congentital vertical talus (CVT), more commonly known as rocker-bottom foot deformity. CVT is characterized by a dislocation of the talonavicular joint but is usually accompanied by other congenital deformities.

# CHROMOSOMAL LOCATION

Genetic locus: HOXD10 (human) mapping to 2q31.1; Hoxd10 (mouse) mapping to 2 C3.

# **SOURCE**

HoxD10 (V-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of HoxD10 of human origin.

# **PRODUCT**

Each vial contains 200  $\mu$ g lgG 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-33004 X, 200  $\mu$ g/0.1 ml.

Blocking peptide available for competition studies, sc-33004 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **APPLICATIONS**

HoxD10 (V-20) is recommended for detection of HoxD10 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)], 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).

HoxD10 (V-20) is also recommended for detection of HoxD10 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for HoxD10 siRNA (h): sc-44814, HoxD10 siRNA (m): sc-44815, HoxD10 shRNA Plasmid (h): sc-44814-SH, HoxD10 shRNA Plasmid (m): sc-44815-SH, HoxD10 shRNA (h) Lentiviral Particles: sc-44814-V and HoxD10 shRNA (m) Lentiviral Particles: sc-44815-V.

HoxD10 (V-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

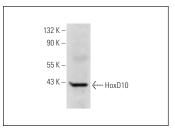
Molecular Weight of HoxD10: 40 kDa.

Positive Controls: mouse heart extract: sc-2254 or ECV304 cell lysate: sc-2269.

#### **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**



HoxD10 (V-20): sc-33004. Western blot analysis of HoxD10 expression in mouse heart 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.



Try **HoxD10 (G-3): sc-166235** or **HoxD10 (B-10): sc-166233**, our highly recommended monoclonal alternatives to HoxD10 (V-20).

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