# SANTA CRUZ BIOTECHNOLOGY, INC.

# HoxB5 (N-20): sc-82894



# 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. HoxB5 (homeobox protein Hox-B5), also known as HOX2, HU-1, HOX2A, Hox2.1 or HHO.C10, is a member of the Antp homeobox (Hox) family. It is a 269 amino acid long nuclear protein expressed in the central nervous system. HoxB5 contains one homeobox DNAbinding domain and plays a role in the regulation of lung and gut development, providing cells with positional identities on the anterior-posterior body axis.

# CHROMOSOMAL LOCATION

Genetic locus: HOXB5 (human) mapping to 17q21.3; Hoxb5 (mouse) mapping to 11 D.

# SOURCE

HoxB5 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of HoxB5 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-82894 X, 200  $\mu$ g/0.1 ml.

Blocking peptide available for competition studies, sc-82894 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

# **APPLICATIONS**

HoxB5 (N-20) is recommended for detection of HoxB5 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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.

Suitable for use as control antibody for HoxB5 siRNA (h): sc-75279, HoxB5 siRNA (m): sc-75280, HoxB5 shRNA Plasmid (h): sc-75279-SH, HoxB5 shRNA Plasmid (m): sc-75280-SH, HoxB5 shRNA (h) Lentiviral Particles: sc-75279-V and HoxB5 shRNA (m) Lentiviral Particles: sc-75280-V.

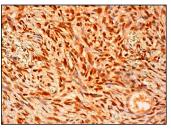
HoxB5 (N-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of HoxB5: 29 kDa.

#### **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) Immunofluo-rescence: 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

### DATA



HoxB5 (N-20): sc-82894. Immunoperoxidase staining of formalin fixed, paraffin-embedded human ovary tissue showing nuclear staining of follicle cells and ovarian stroma cells.

# **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 Satisfation Guaranteed

Try HoxB5 (133C3a): sc-81099, our highly recommended monoclonal alternative to HoxB5 (N-20).