

HoxB13 (H-80): sc-66923

BACKGROUND

HOX genes play a fundamental role in the development of the vertebrate central nervous system, heart, axial skeleton, limbs, gut, urogenital tract and external genitalia. HoxB13 is a sequence-specific transcription factor which is part of a developmental regulatory system that provides cells with specific positional identities on the anterior-posterior axis. HoxB13 is highly expressed in the prostate gland from the embryonic stages to adulthood and is required for normal differentiation and secretory function of that organ. HoxB13 is primarily expressed in the nucleus, but is cytoplasmic throughout fetal skin development and some hyperproliferative skin conditions.

REFERENCES

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4. Economides, K.D., et al. 2003. HoxB13 is required for normal differentiation and secretory function of the ventral prostate. Development 130: 2061-2069.
5. Komuves, L.G., et al. 2003. HoxB13 homeodomain protein is cytoplasmic throughout fetal skin development. Dev. Dyn. 227: 192-202.
6. Jung, C., et al. 2004. HoxB13 homeodomain protein suppresses the growth of prostate cancer cells by the negative regulation of T cell factor 4. Cancer Res. 64: 3046-3051.
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CHROMOSOMAL LOCATION

Genetic locus: HOXB13 (human) mapping to 17q21.32; Hoxb13 (mouse) mapping to 11 D.

SOURCE

HoxB13 (H-80) is a rabbit polyclonal antibody raised against amino acids 1-80 mapping at the N-terminus of HoxB13 of human origin.

PRODUCT

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

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-66923 X, 200 µg/0.1 ml.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

HoxB13 (H-80) is recommended for detection of HoxB13 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), 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).

HoxB13 (H-80) is also recommended for detection of HoxB13 in additional species, including equine and porcine.

Suitable for use as control antibody for HoxB13 siRNA (h): sc-43851, HoxB13 siRNA (m): sc-45668, HoxB13 shRNA Plasmid (h): sc-43851-SH, HoxB13 shRNA Plasmid (m): sc-45668-SH, HoxB13 shRNA (h) Lentiviral Particles: sc-43851-V and HoxB13 shRNA (m) Lentiviral Particles: sc-45668-V.

HoxB13 (H-80) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

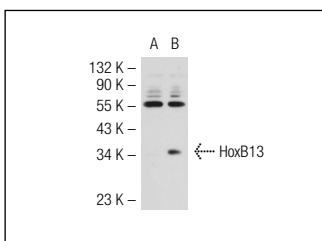
Molecular Weight of HoxB13: 34 kDa.

Positive Controls: LNCaP cell lysate: sc-2231 or HoxB13 (m3): 293T Lysate: sc-125465.

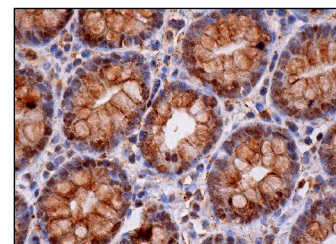
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



HoxB13 (H-80): sc-66923. Western blot analysis of HoxB13 expression in non-transfected: sc-117752 (A) and mouse HoxB13 transfected: sc-125465 (B) 293T whole cell lysates.



HoxB13 (H-80): sc-66923. Immunoperoxidase staining of formalin fixed, paraffin-embedded human colon tissue showing nuclear and cytoplasmic staining of glandular cells.

STORAGE

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