

HoxB7 (Z-25): sc-133670

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. The mammalian HOX gene complex consists of 39 genes that are located on 4 linkage groups, which are dispersed over 4 chromosomes. A segment of the HoxB7 proximal promoter drives renal expression of reporter genes specifically in the ureteric bud and collecting ducts. Expression levels of HoxB7 are lower in lymph node metastasis-positive cancer tissues than negative cancer tissues. These results suggest that aberrant expression of HOX genes is related to the development of breast cancer and malignant behavior of cancer cells.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: HOXB7 (human) mapping to 17q21.32; Hoxb7 (mouse) mapping to 11 D.

SOURCE

HoxB7 (Z-25) is an affinity purified rabbit polyclonal antibody raised against synthetic HoxB7 peptide of human origin.

PRODUCT

Each vial contains 50 μ g IgG in 0.5 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

RESEARCH USE

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

APPLICATIONS

HoxB7 (Z-25) is recommended for detection of HoxB7 of mouse, rat, human and canine and *Drosophila melanogaster*, zebrafish 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

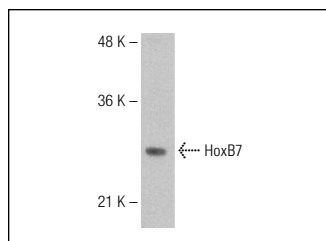
Suitable for use as control antibody for HoxB7 siRNA (h): sc-45835, HoxB7 siRNA (m): sc-45836, HoxB7 shRNA Plasmid (h): sc-45835-SH, HoxB7 shRNA Plasmid (m): sc-45836-SH, HoxB7 shRNA (h) Lentiviral Particles: sc-45835-V and HoxB7 shRNA (m) Lentiviral Particles: sc-45836-V.

Molecular Weight of HoxB7: 24 kDa.

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).

DATA



HoxB7 (Z-25): sc-133670. Western blot analysis of human HoxB7 transfected 293T whole cell lysate.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

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Try **HoxB7 (747C4a): sc-81292**, our highly recommended monoclonal alternative to HoxB7 (Z-25).