

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human HOXB13 in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived human HOXB13 Met1-Gln102 Accession # Q92826
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

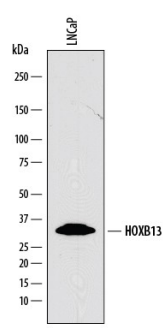
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Immunocytochemistry	5-15 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below

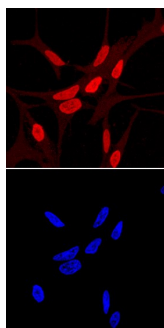
DATA

Western Blot



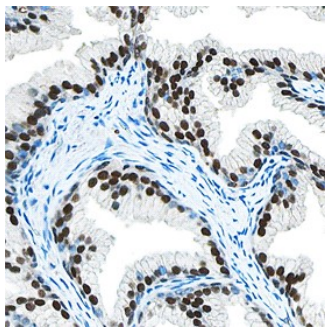
Detection of Human HOXB13 by Western Blot. Western blot shows lysates of LNCaP human prostate cancer cell line. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human HOXB13 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF8156) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for HOXB13 at approximately 34 kDa (as indicated). This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 1](#).

Immunocytochemistry



HOXB13 in LNCaP Human Cell Line. HOXB13 was detected in immersion fixed LNCaP human prostate cancer cell line using Sheep Anti-Human HOXB13 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF8156) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (red, upper panel; Catalog # NL010) and counterstained with DAPI (blue, lower panel). Specific staining was localized to nuclei. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Immunohistochemistry



HOXB13 in Human Prostate. HOXB13 was detected in formalin fixed paraffin-embedded sections of human prostate using Sheep Anti-Human HOXB13 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF8156) at 1 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). Specific staining was localized to nuclei in epithelial cells. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

HOXB13 (Homeobox B13) is a member of the homeobox family of transcription factors with a reported molecular weight of approximately 34 kDa. It is 284 amino acids in length and shares 93% aa identity with mouse and rat HOXB13. HOXB13 plays an important role in prostate cancer. Its expression promotes metastasis of prostate cancers and mutations in HOXB13 are associated with early onset disease. Elevated expression of HOXB13 is also associated with aggressive breast cancers, which may be due in part to its ability to reduce the expression of Estrogen Receptor α and increase expression of IL-6.