Human SOX11 Antibody

Antigen Affinity-purified Polyclonal Sheep IgG
Catalog Number: AF3976

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human SOX11 in direct ELISAs and Western blots. In direct ELISAs, less than 5% cross-reactivity with recombinant human (rh) SOX1, rhSOX2, rhSOX3, rhSOX5, rhSOX6, rhSOX7, rhSOX9, rhSOX10, rhSOX12, rhSOX14, rhSOX15, rhSOX17, and rhSOX21 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant human SOX11 Val2-Pro173 Accession # P35716
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 as a 0.2 μm filtered solution in PBS.

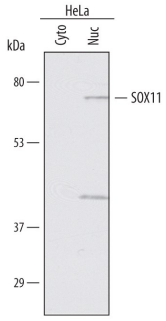
APPLICATIONS

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

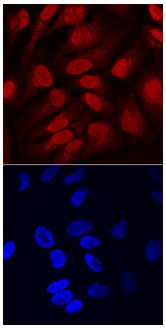
DATA

Western Blot



Detection of Human SOX11 by Western Blot. Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line. Gels were loaded with 25 µg of cytoplasmic (Cyto) and 25 µg of nuclear (Nuc) extracts. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human SOX11 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3976) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for SOX11 at approximately 70 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunocytochemistry



SOX11 in HeLa Human Cell Line. SOX11 was detected in immersion fixed HeLa human cervical epithelial carcinoma cell line using Sheep Anti-Human SOX11 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3976) 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 and cytoplasm. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

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.** ● 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

Human SOX11 (SRY box-related gene 11) is a 60-72 kDa (46.6 kDa predicted), group C member of the SOX family of transcription factors. It is 441 amino acids (aa) in length, and contains one HMG box (aa 49-117), two poly-Gly regions (aa 144-214), one poly-Asp domain (aa 223-233) and one poly-Ser region. The HMG box determines DNA and transcriptional coactivator binding, the poly-Ser region lies in a potent transactivating region, and the poly-Asp domain autoinhibits/regulates activities of the other two regions. SOX11 appears early in development in multiple tissues, and impacts neuron, oligodendrocyte and cartilage formation. Human SOX11 is 94% aa identical to mouse SOX11 over aa 1-173. Mouse SOX11, however, is absent a 12 aa poly-Gly sequence that is present in human SOX11 between aa 145-156. Additional band correspondent to the lower molecular weight may represent SOX11 without posttranslational modifications or human SOX4, over aa 38-123 human SOX11 shares 100% aa identity with human SOX4. (1)

References:

1. Dictor, M. *et al.* (2009) Haematologica **94**:1563.