

DESCRIPTION

Species Reactivity	Human
Specificity	Detects recombinant human SOX11 protein in Direct ELISA.
Source	Monoclonal Mouse IgG _{2B} Clone # 1106960
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	E. coli - derived recombinant human SOX-11 Met1-Pro173 Accession # P35716
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose.

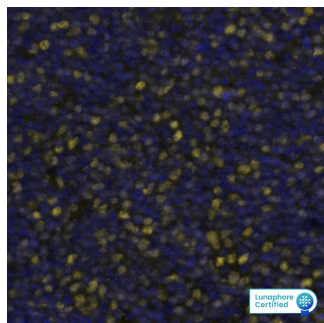
APPLICATIONS

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	2 µg/mL	SH-SY5Y human neuroblastoma cell line
Immunohistochemistry	3-25 µg/mL	Immersion fixed paraffin-embedded sections of human glioblastoma and mantle cell lymphoma

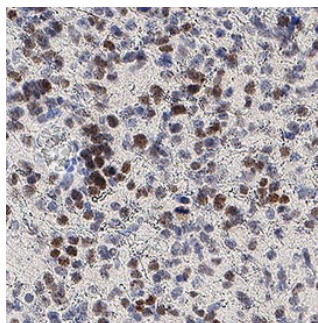
DATA

Multiplex Immunofluorescence



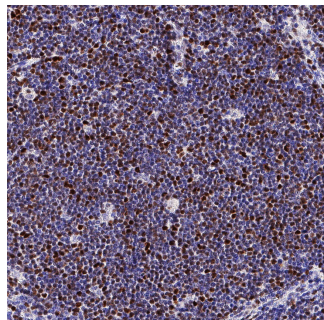
SOX11 in Human Mantle Cell Lymphoma via seqIF™ staining on COMET™ SOX11 was detected in immersion fixed paraffin-embedded sections of human Mantle Cell Lymphoma using Mouse Anti-Human SOX11, Monoclonal Antibody (Catalog # MAB11734) at 25µg/mL at 37° Celsius for 8 minutes. Before incubation with the primary antibody, tissue underwent an all-in-one dewaxing and antigen retrieval preprocessing using PreTreatment Module (PT Module) and Dewax and HIER Buffer H (pH 9; Eprelia Catalog # TA-999-DHBH). Tissue was stained using the Alexa Fluor™ 647 Goat anti-Mouse IgG Secondary Antibody at 1:200 at 37° Celsius for 8 minutes. (Yellow; Lunaphore Catalog # DR647MS) and counterstained with DAPI (blue; Lunaphore Catalog # DR100). Specific staining was localized to the nucleus. Protocol available in [COMET™ Panel Builder](#).

Immunohistochemistry



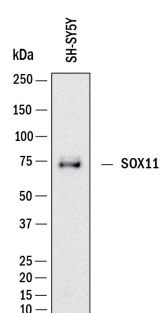
Detection of SOX11 in Human Glioblastoma. SOX11 was detected in immersion fixed paraffin-embedded sections of human glioblastoma using Mouse Anti-Human SOX11 Monoclonal Antibody (Catalog # MAB11734) at 5 µg/ml for 1 hour at room temperature followed by incubation with the HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using VisUCyte Antigen Retrieval Reagent-Basic (Catalog # VCTS021). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to the nucleus. View our protocol for [IHC Staining with VisUCyte HRP Polymer Detection Reagents](#).

Immunohistochemistry



Detection of SOX11 in human Mantle Cell Lymphoma SOX11 was detected in immersion fixed paraffin-embedded sections of human mantle cell lymphoma using Mouse Anti-Human SOX11 Monoclonal Antibody (Catalog # MAB11734) at 15 µg/ml overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using VisUCyte Antigen Retrieval Reagent-Basic (Catalog # VCTS021). Tissue was stained using the HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007) and counterstained with hematoxylin (blue). Specific staining was localized to the nucleus. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

Western Blot



Detection of Human SOX11 by Western Blot. Western Blot shows lysates of SH-SY5Y human neuroblastoma cell line. PVDF membrane was probed with 2 µg/ml of Mouse Anti-Human SOX11 Monoclonal Antibody (Catalog # MAB11734) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for SOX11 at approximately 70 kDa (as indicated). This experiment was conducted under reducing conditions and using [Western Blot Buffer Group 1](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute lyophilized material at 0.2 mg/ml in sterile PBS. For liquid material, refer to CoA for concentration.
Shipping	Lyophilized product is shipped at ambient temperature. Liquid small pack size (-SP) is shipped with polar packs. Upon receipt, store immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <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

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.