

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human SOX1 in direct ELISAs and Western blots. In direct ELISAs, less than 15% cross-reactivity with recombinant human (rh) SOX2 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human SOX1 Asn242-Gly379 (Leu276Ile) Accession # NP_005977
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.

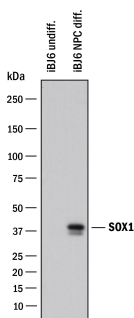
APPLICATIONS

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
Simple Western	10 µg/mL	See Below

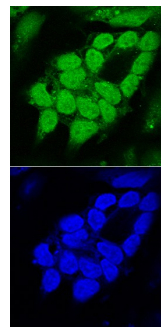
DATA

Western Blot



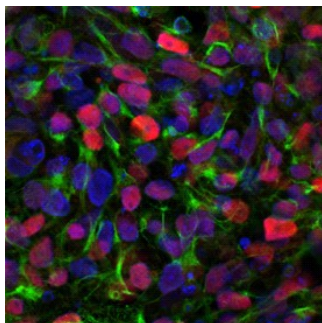
Detection of Human SOX1 by Western Blot. Western blot shows lysates of undifferentiated iBJ6 human iPS cells and iBJ6 human iPS cells differentiated into neuroprogenitor cells. PVDF membrane was probed with 1 µg/mL of Goat Anti-Human/Mouse/Rat SOX1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3369) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for SOX1 at approximately 39 kDa (as indicated). This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 1](#).

Immunocytochemistry



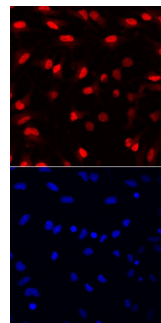
SOX1 in differentiated Ntera-2 Human Cell Line. SOX1 was detected in immersion fixed Ntera-2 human testicular embryonic carcinoma cell line differentiated with retinoic acid using Goat Anti-Human/Mouse/Rat SOX1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3369) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 493-conjugated Anti-Goat IgG Secondary Antibody (green, upper panel; Catalog # NL003) and counterstained with DAPI (blue, lower panel). View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Immunocytochemistry



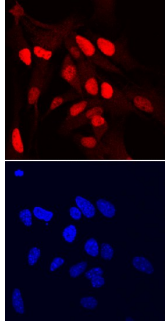
SOX1 in ectoderm differentiated BG01V Human Embryonic Stem Cells. SOX1 was detected in immersion fixed BG01V human embryonic stem cells differentiated into neural progenitor cells using Goat Anti-Human/Mouse/Rat SOX1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3369) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). Nestin was also detected using Mouse Anti-Mouse/Rat Nestin Monoclonal Antibody (Catalog # MAB2736) and stained using the NorthernLights™ 493-conjugated Anti-Mouse IgG Secondary Antibody (green; Catalog # NL009). Specific staining of SOX1 was localized to nuclei. View our protocol for [Fluorescent ICC Staining of Stem Cells on Coverslips](#).

Immunocytochemistry



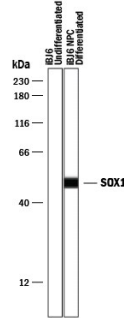
SOX1 in Rat Cortical Stem Cells. SOX1 was detected in immersion fixed rat cortical stem cells (Catalog # NSC001) using Goat Anti-Human/Mouse/Rat SOX1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3369) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red, upper panel; Catalog # NL001) and counterstained with DAPI (blue, lower panel). Specific staining was localized to nuclei. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Immunocytochemistry



SOX1 in Mouse Cortical Stem Cells. SOX1 was detected in immersion fixed mouse cortical stem cells (Catalog # NSC002) using Goat Anti-Human/Mouse/Rat SOX1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3369) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red, upper panel; Catalog # NL001) and counterstained with DAPI (blue, lower panel). Specific staining was localized to nuclei. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Simple Western



Detection of Human SOX1 by Simple Western™. Simple Western lane view shows lysates of undifferentiated iBJ6 human iPS cells and iBJ6 human iPS cells differentiated into neuroprogenitor cells, loaded at 0.2 mg/mL. A specific band was detected for SOX1 at approximately 50 kDa (as indicated) using 10 µg/mL of Goat Anti-Human/Mouse/Rat SOX1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3369) followed by 1:50 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



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	<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

SOX1 is a 39 kDa transcription factor that belongs to the SOXB1 subgroup. Within the developing CNS, SOX1 maintains neural cells in an undifferentiated state and has been used as a marker for neural stem cells. Human and mouse SOX1 share 97% amino acid sequence identity.