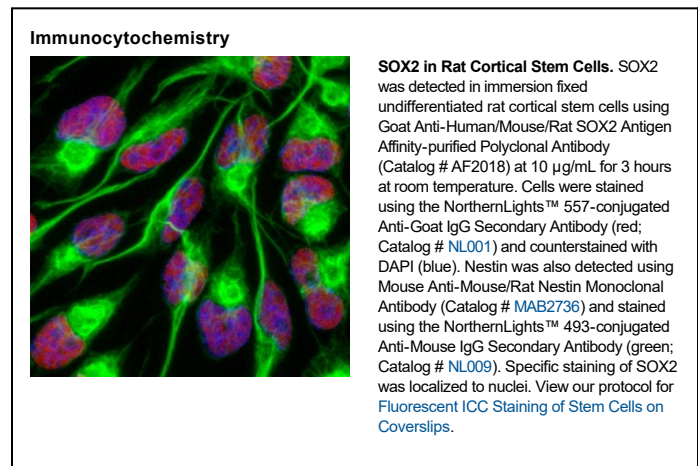
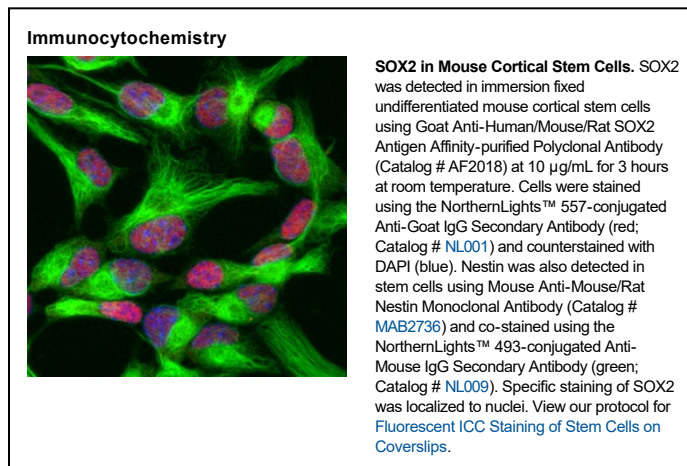
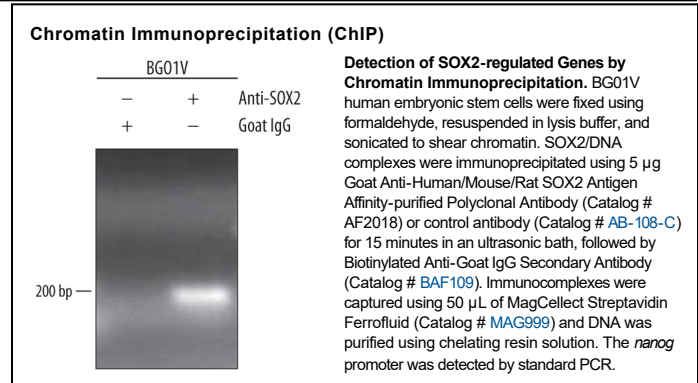
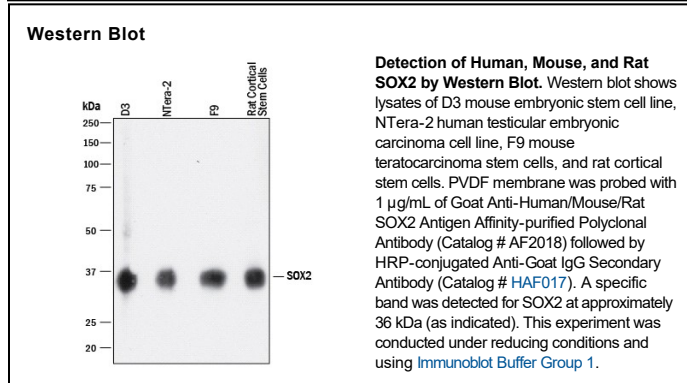


DESCRIPTION	
Species Reactivity	Human/Mouse/Rat
Specificity	Detects human SOX2 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human (rh) SOX1 and rhSOX17 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human SOX2 Gly135-Met317 Accession # P48431
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.

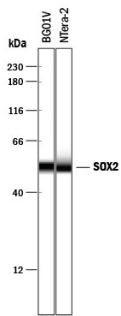
APPLICATIONS
Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Chromatin Immunoprecipitation (ChIP)	5 µg/5 x 10 ⁶ cells	See Below
Immunocytochemistry	5-15 µg/mL	See Below
Simple Western	5 µg/mL	See Below

DATA



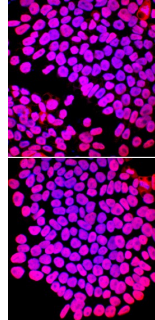
Simple Western



Detection of Human SOX2 by Simple Western™. Simple Western lane view shows lysates of BG01V human embryonic stem cells and Ntera-2 human testicular embryonic carcinoma cell line, loaded at 0.2 mg/mL. A specific band was detected for SOX2 at approximately 53 kDa (as indicated) using 5 µg/mL of Goat Anti-Human/Mouse/Rat SOX2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2018) 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.



Immunocytochemistry



SOX2 in ADLF1 and FAB2 Stem Cell Lines. SOX2 was detected in immersion fixed ADLF1 (top panel) and FAB2 (bottom panel) induced pluripotent stem cell lines using Goat Anti-Human/Mouse/Rat SOX2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2018) 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). Specific staining was localized to nuclei. View our protocol for [Fluorescent ICC Staining of Stem 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. <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

SOX2 belongs to the SOX (SRY-like HMG box) family of transcription factors with diverse roles in development. SOX2 functions in specifying the first three lineages present at implantation and in regulating proliferation and differentiation in the developing peripheral nervous system (1-5).

References:

1. Graham, V. *et al.* (2003) *Neuron* **39**:749.
2. Avilion, A.A. *et al.* (2003) *Genes Dev.* **17**:126.
3. Kishi, M. *et al.* (2000) *Development* **127**:791.
4. Yuan, H. *et al.* (1995) *Genes Dev.* **9**:2635.
5. Uwanogho, D. *et al.* (1995) *Mech. Dev.* **49**:23.
6. Stevanovic, M. (2003) *Mol. Biol. Rep.* **30**:127.