

DESCRIPTION

Species Reactivity	Human/Rat
Specificity	Detects human and rat SOX10. Epitope-mapping experiments indicated that clone 20B7 recognizes a determinant in the first 65 amino acids, which contains sequences unique to SOX10 (1).
Source	Monoclonal Mouse IgG ₁ Clone # 20B7
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant rat SOX10 aa 1-118
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.

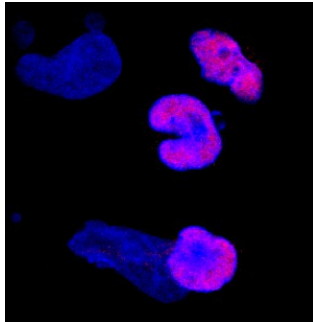
APPLICATIONS

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
Immunocytochemistry	8-25 µg/mL	See Below
Immunohistochemistry	5-25 µg/mL	See Below

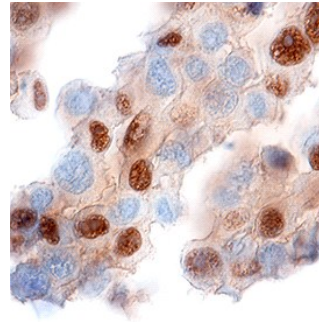
DATA

Immunocytochemistry



SOX10 in BG01V Human Embryonic Stem Cells. SOX10 was detected in immersion fixed BG01V human embryonic stem cells differentiated to neural crest stem cells using Mouse Anti-Human/Rat SOX10 Monoclonal Antibody (Catalog # MAB2864) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to nuclei. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Immunohistochemistry



SOX10 in Human Melanoma Tissue. SOX10 was detected in immersion fixed paraffin-embedded sections of human melanoma tissue using Mouse Anti-Human/Rat SOX10 Monoclonal Antibody (Catalog # MAB2864) at 5 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to nuclei. View our protocol for [IHC Staining with VisUCyte HRP Polymer Detection Reagents](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 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

SOX10 belongs to the SOX family of transcription factors which display diverse roles during development. In the central nervous system, SOX10 is required for the terminal differentiation of oligodendrocytes and myelination. In the peripheral nervous system, SOX10 maintains pluripotency of neural crest stem cells and suppresses neuronal differentiation.

References:

1. Lo, L. *et al.* (2002) *Development* **129**:1553.