

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects a synthetic peptide specific for mouse SOX10 around amino acid 180 in Direct ELISA.
Source	Monoclonal Rat IgG ₁ Clone # 1122619
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Synthetic Peptide Accession # Q04888
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose.

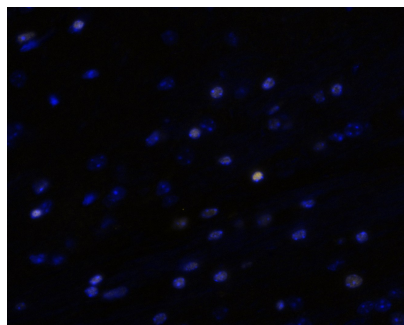
APPLICATIONS

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	B16-F1 mouse melanoma cell line
Immunohistochemistry	0.25-25 µg/mL	Immersion fixed paraffin-embedded sections of mouse cerebellum
COMET	25 µg/mL	Immersion fixed paraffin-embedded sections of mouse cerebral cortex

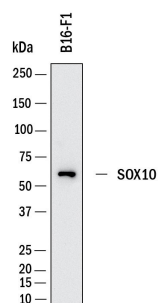
DATA

Multiplex Immunofluorescence



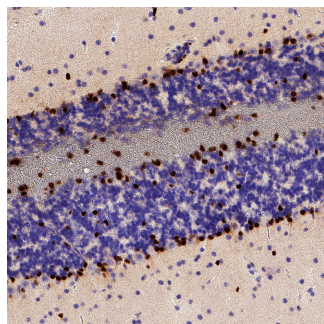
SOX10 in Mouse Cerebral Cortex via seqIF™ staining on COMET™ SOX10 was detected in immersion fixed paraffin-embedded sections of mouse cerebral cortex using Rat Anti-Mouse SOX10, Monoclonal Antibody (Catalog # MAB11810) at 25 µg/mL at 27 ° Celsius for 8 minutes. Before incubation with the primary antibody, 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-Rat IgG Secondary Antibody at 1:200 at 37 ° Celsius for 2 minutes. (Yellow; Lunaphore Catalog # DR647RT) and counterstained with DAPI (blue; Lunaphore Catalog # DR100). Specific staining was localized to the nucleus. Protocol available in [COMET™ Panel Builder](#).

Western Blot



Detection of Mouse SOX10 by Western Blot. Western Blot shows lysates of B16-F1 mouse melanoma cell line. PVDF membrane was probed with 2 µg/ml of Rat Anti-Mouse SOX10 Monoclonal Antibody (Catalog # MAB11810) followed by HRP-conjugated Anti-Rat IgG Secondary Antibody (Catalog # HAF005). A specific band was detected for SOX10 at approximately 62 kDa (as indicated). This experiment was conducted under reducing conditions and using [Western Blot Buffer Group 1](#).

Immunohistochemistry



Immersion fixed paraffin-embedded sections of mouse cerebellum SOX10 was detected in immersion fixed paraffin-embedded sections of mouse cerebellum using Rat Anti-Mouse SOX10 Monoclonal Antibody (Catalog # MAB11810) at 5 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-Rat IgG Secondary Antibody (Catalog # HAF005) and counterstained with hematoxylin (blue). Specific staining was localized to the nucleus. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

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	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

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.