

SOX10 Monoclonal Antibody (20B7), eBioscience™

Product Details

Size	100 µg
Species Reactivity	Human, Mouse, Rat
Published Species	Mouse
Host/Isotype	Mouse / IgG1, kappa
Class	Monoclonal
Type	Antibody
Clone	20B7
Conjugate	Unconjugated
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C
RRID	AB_2572892

Applications	Tested Dilution	Publications
Western Blot (WB)	1 µg/ml	-
Immunohistochemistry (IHC)	-	1 Publication
Immunohistochemistry (Paraffin) (IHC (P))	10 µg/mL	-
Immunohistochemistry (Frozen) (IHC (F))	10 µg/mL	-
Immunocytochemistry (ICC/IF)	5 - 10 µg/mL	-

Product Specific Information

Description: The monoclonal antibody 20B7 recognizes Sox10, is a member of the Sox superfamily (SRY-related HMG-box) that contain a DNA binding domain (high-mobility group domain) and functions as a transcription factor. Initially, Sox10 expression is localized to the developing neural crest and peripheral nervous system, but later is expressed in glial progenitors and mature oligodendrocytes. Sox10 is involved in stem cell maintenance, melanocyte differentiation, as well as central and peripheral gliogenesis and neurogenesis. Sox10 regulation of downstream proteins such as MASH1, PHOX2B, PDGF-alpha, and MITF is dependent on expression level. Sox10 is also expressed in multipotent vascular stem cells, melanomas, and gliomas.

The 20B7 antibody is reported to recognize human and rat Sox 10, and based on homology should recognize mouse Sox10.

Applications Reported: This 20B7 antibody has been reported for use in immunohistochemical staining of frozen tissue sections, immunohistochemical staining of formalin-fixed paraffin embedded tissue sections, microscopy, and immunocytochemistry.

Applications Tested: This 20B7 antibody has been tested by immunocytochemistry of formaldehyde fixed and permeabilized rat cells. This 20B7 antibody has also been tested by immunohistochemistry of human formalin-fixed paraffin embedded tissue sections using low pH antigen retrieval and can be used at less than or equal to 10 µg/mL for both applications. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Purity: Greater than 90%, as determined by SDS-PAGE.

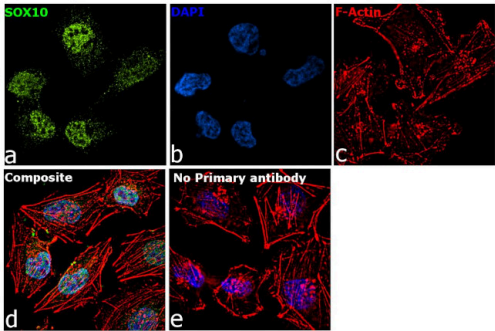
Aggregation: Less than 10%, as determined by HPLC.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For SOX10 Monoclonal Antibody (20B7), eBioscience™

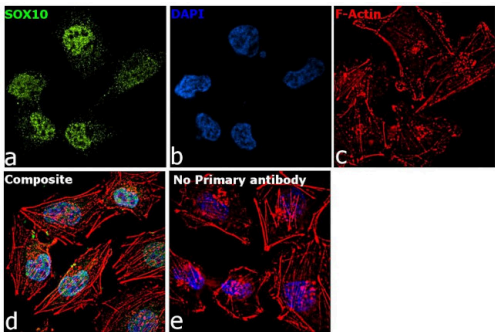
SOX10 Antibody (14-5923-82) in ICC/IF

Immunofluorescence analysis of SOX10 was performed using 70% confluent log phase A-375 cells treated with SOX10 polyclonal antibody (Product # 14-5923-80). The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 15 minutes, and blocked with 2% BSA for 1 hour at room temperature. cells were labeled with SOX10 polyclonal antibody (Product # PA5-40697) at 5µg/mL in 0.1% BSA, incubated at 4 degree celsius overnight and then labeled with Goat anti-Mouse IgG (H+L) Superclonal™ Recombinant Secondary Antibody, Alexa Fluor® 488 conjugate (Product # A28175) at a dilution of 1:2000 for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with ProLong™ Diamond Antifade Mountant with DAPI (Product # P36962). F-actin (Panel c: red) was stained with Rhodamine Phalloidin (Product # R415). Panel d represents the merged image showing nuclear localization. Panel e represents control cells with no primary antibody to assess background. The images were captured at 60X magnification.



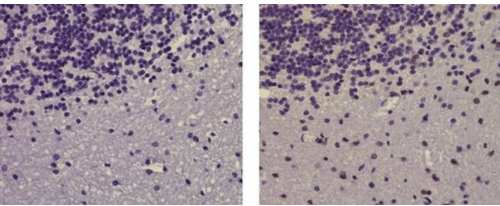
SOX10 Antibody (14-5923-82) in ICC/IF

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SOX10 Antibody (14-5923-82) in IHC (P)

Immunohistochemistry of formalin-fixed paraffin embedded human cerebellum stained with 10 µg/mL of Mouse IgG1 K Isotype Control Purified (Product # 14-4714-82) (left) or 10 µg/mL of Anti-Sox10 Purified (right) followed by Anti-Mouse IgG Biotin, Streptavidin HRP, and DAB visualization.Nuclei are counterstained with hematoxylin.



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Immunohistochemistry (1)

Scientific reports	Year 2017
Early embryonic development and spatiotemporal localization of mammalian primordial germ cell-associated proteins in the basal rodent <i>Lagostomus maximus</i> .	Species Mouse
"14-5923 was used in Immunohistochemistry to investigate the embryonic development and the spatiotemporal localisation of primordial germ cell-associated proteins in the basal Hystriognathi rodent, <i>Lagostomus maximus</i> ."	
Authors: Leopardo NP,Vitullo AD	

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