

Mouse anti-Human, Mouse SOX10 Monoclonal Antibody | anti-SOX10 antibody

SOX10 (Melanoma Marker) Mouse Monoclonal Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA13845	Mouse	Human, Mouse	Flow Cytometry, Functional Assay, Immunofluorescence, Western Blot, Immunohistochemistry

PRODUCT SYNONYMS

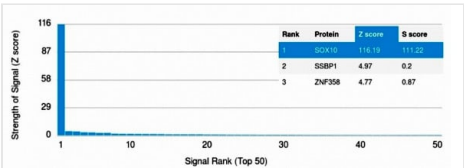
SOX10; Monoclonal Antibody; SOX10 (Melanoma Marker) Mouse Monoclonal Antibody; DOM; PCWH; SRY (sex determining region Y) box 10; SRY box containing gene 10; SRY related HMG box gene 10; Waardenburg syndrome type 2E (WS2E); WS4; Waardenburg syndrome type 4C (WS4C); anti-SOX10 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human, Mouse
Clonality	Monoclonal
Isotype	IgG2b, kappa
Clone Number	SOX10/991
Specificity	The specificity of this monoclonal antibody to its intended target was validated by HuProt™ Array, containing more than 19,000, full-length human proteins. Recognizes a protein of ~55kDa, identified as SOX10. This MAb is highly specific and does not cross-react with other members of the SOX-family. SOX genes comprise a family of genes that are related to the mammalian sex-determining gene SRY. These genes similarly contain sequences that encode for the HMG-box domain, which is responsible for the sequence-specific DNA-binding activity. SOX-10 is a sensitive marker of melanoma, including conventional, spindled, and desmoplastic subtypes. It is expressed by metastatic melanomas and nodal capsular nevus in sentinel lymph nodes, but not by other lymph node components such as dendritic cells, which usually express S100 protein. Commonly used melanoma markers, such as anti-HMB-45 and anti-Melan-A, are poorly expressed in desmoplastic melanomas while SOX-10 is moderately to strongly expressed in desmoplastic melanomas. SOX-10 is considered as a very reliable marker for recognizing residual desmoplastic melanomas. In normal tissues, it is expressed in Schwann cells, melanocytes, and myoepithelial cells of salivary, bronchial and mammary glands. SOX-10 expression is also observed in mast cells.
Form/Format	200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Sequence Length	466
Applicable Applications for anti-SOX10 antibody	FCM/FACS (Flow Cytometry), IF (Immunofluorescence), WB (Western Blot), IHC (Immunohistochemistry)
Application Notes	Immunohistochemistry (IHC) 1-2ug/ml Western Blot (WB) 2-4ug/ml Western Blot (1-2ug/ml) Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT)(Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes) Optimal dilution for a specific application should be determined.
Cellular Localization	Cytoplasm, Mitochondrion outer membrane, Nucleus
Immunogen	Recombinant human SOX10 protein fragment (around aa115-269) (exact sequence is proprietary)
Hu-Chromosome Location	22q13.1
Positive Control	HepG2 cells. Melanomas, breast carcinomas, gliomas.

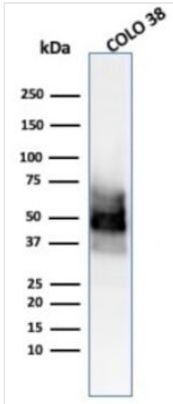
Research Areas	Developmental Biology, Neural Stem Cells, Nuclear Marker
Preparation and Storage	Antibody with azide: Store at 2 to 8°C. Non- hazardous. No MSDS required.

IMAGES



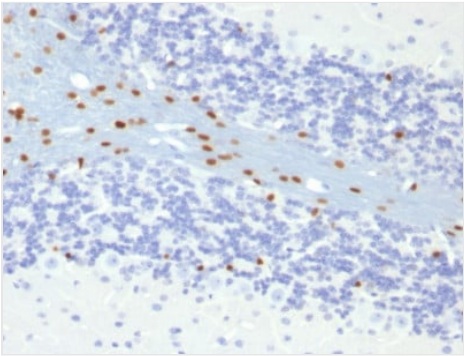
Application Data

Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



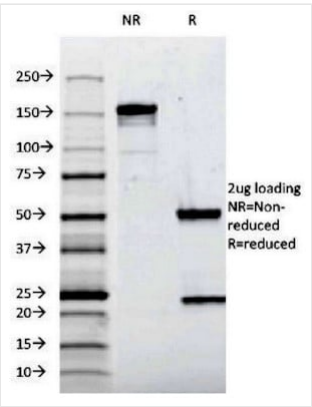
WB (Western Blot)

Western Blot Analysis of COLO-38 cell lysate usingSOX10 Mouse Monoclonal Antibody (SOX10/991).



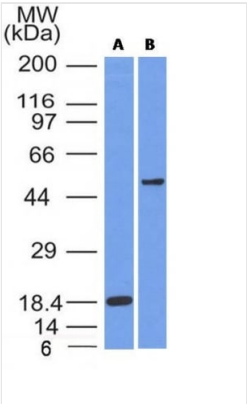
IHC (Immunohistochemistry)

Formalin-fixed, paraffin-embedded Mouse Brain stained with SOX10 Mouse Monoclonal Antibody (SOX10/991).



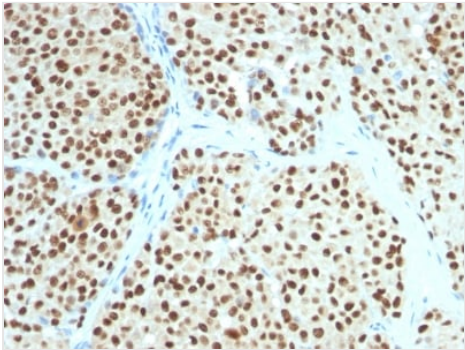
SDS-PAGE

SDS-PAGE Analysis Purified SOX10 Mouse Monoclonal Antibody (Clone# SOX10/991).Confirmation of Integrity and Purity of Antibody.



WB (Western Blot)

Western Blot of SOX10 (A) Recombinant protein (B) A375 Cell Lysate using SOX10 Monoclonal Antibody (SOX10/991).



IHC (Immunohistochemistry)

Formalin-fixed, paraffin-embedded human Melanoma stained with SOX10 Monoclonal Antibody (SOX10/991).

ADDITIONAL INFORMATION

References	Mohamed A, et al. SOX10 Expression in malignant melanoma, carcinoma, and normal tissues. Appl Immunohistochem Mol Morphol. 2013; 21(6):506-10.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	5902104
NCBI GeneID	6663
NCBI Accession #	NP_008872.1
NCBI GenBank Nucleotide #	NM_006941.3
UniProt Accession #	P56693; Q6FWH7; B4DV62
Molecular Weight	49-58kDa
NCBI Official Full Name	transcription factor SOX-10
NCBI Official Synonym Full Names	SRY-box 10
NCBI Official Symbol	SOX10
NCBI Official Synonym Symbols	DOM; WS4; PCWH; WS2E; WS4C
NCBI Protein Information	transcription factor SOX-10
UniProt Protein Name	Transcription factor SOX-10
UniProt Gene Name	SOX10
UniProt Entry Name	SOX10_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/monoclonal/sox10-antibody-clone-sox10-991-flow-cytometry-immunofluorescence-western-blot-immunohistochemistry-elisa/13845>