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SOX10 (Melanoma Marker) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone SPM607]
Catalog # AH12346

Product Information

Application	WB, IHC, IF, FC
Primary Accession	P56693
Other Accession	6663, 376984
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG2b, kappa
Clone Names	SPM607
Calculated MW	49911

Additional Information

Gene ID	6663
Other Names	Transcription factor SOX-10, SOX10
Application Note	WB~~1:1000 IHC~~1:100~500 IF~~1:50~200 FC~~1:10~50
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	SOX10 (Melanoma Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SOX10
Function	Transcription factor that plays a central role in developing and mature glia (By similarity). Specifically activates expression of myelin genes, during oligodendrocyte (OL) maturation, such as DUSP15 and MYRF, thereby playing a central role in oligodendrocyte maturation and CNS myelination (By similarity). Once induced, MYRF cooperates with SOX10 to implement the myelination program (By similarity). Transcriptional activator of MITF, acting synergistically with PAX3 (PubMed:21965087). Transcriptional activator of MBP, via binding to the gene promoter (By similarity).
Cellular Location	Cytoplasm. Nucleus. Mitochondrion outer membrane {ECO:0000250|UniProtKB:Q04888}; Peripheral membrane protein {ECO:0000250|UniProtKB:Q04888}; Cytoplasmic side {ECO:0000250|UniProtKB:Q04888}

Tissue Location	Expressed in fetal brain and in adult brain, heart, small intestine and colon

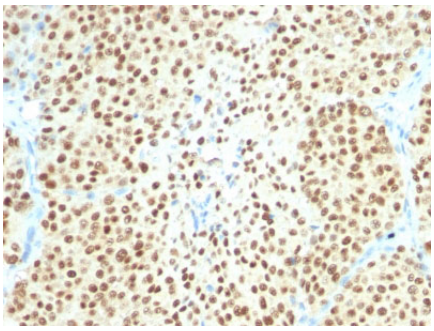
Background

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.

References

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

Images



Formalin-fixed, paraffin-embedded human Melanoma stained with SOX10 Monoclonal Antibody (SPM607).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.