

SOX10 (Melanoma Marker) Antibody - With BSA and Azide Mouse Monoclonal Antibody [Clone SOX10/1074 ] Catalog # AH12343

### Specification

## SOX10 (Melanoma Marker) Antibody - With BSA and Azide - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW WB, IHC, IF, FC <u>P56693</u> <u>6663</u>, <u>376984</u> Human Mouse Monoclonal Mouse / IgG2b, kappa 49-58kDa KDa

## SOX10 (Melanoma Marker) Antibody - With BSA and Azide - Additional Information

Gene ID 6663

**Other Names** Transcription factor SOX-10, SOX10

Application Note <span class ="dilution\_WB">WB~~1:1000</span><br \><span class ="dilution\_IHC">IHC~~1:100~500</span><br \><span class ="dilution\_IF">IF~~1:50~200</span><br \><span class ="dilution\_FC">FC~~1:10~50</span>

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.

#### SOX10 (Melanoma Marker) Antibody - With BSA and Azide - 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:<a href="http://www.uniprot.org/citations/21965087" target="\_blank">21965087</a>). 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

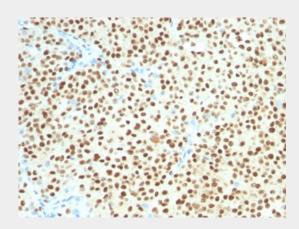
Expressed in fetal brain and in adult brain, heart, small intestine and colon

## SOX10 (Melanoma Marker) Antibody - With BSA and Azide - Protocols

Provided below are standard protocols that you may find useful for product applications.

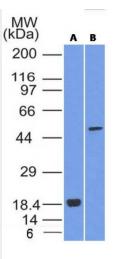
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# SOX10 (Melanoma Marker) Antibody - With BSA and Azide - Images



Formalin-fixed, paraffin-embedded human Melanoma stained with SOX10 Monoclonal Antibody (SOX10/1074).





Western Blot of SOX10 (A) Recombinant protein; (B) A375 Cell Lysate using SOX10 Monoclonal Antibody (SOX10/1074).

# SOX10 (Melanoma Marker) Antibody - With BSA and Azide - 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. 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.

## SOX10 (Melanoma Marker) Antibody - With BSA and Azide - References

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