

## SOX10 (Melanoma Marker) Antibody

Mouse Monoclonal Antibody [Clone SOX10/1074]

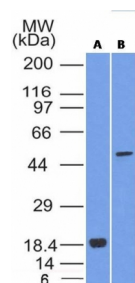
Catalog No	Format	Size
6663-MSM3-P0	Purified Ab with BSA and Azide	200ug/ml
6663-MSM3-P1	Purified Ab with BSA and Azide	200ug/ml
6663-MSM3-P1ABX	Purified Ab WITHOUT BSA and Azide	1.0mg/ml

Applications	Tested Dillution
Immunohistochemistry (IHC)	1-2ug/ml
Western Blot (WB)	2-4ug/ml

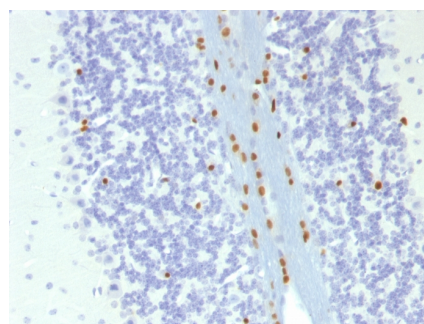
Product Details	
Clone	SOX10/1074
Gene Name	SOX10
Immunogen	Recombinant human SOX10 protein fragment (around aa115-269) (exact sequence is proprietary)
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG2b / Kappa
Mol. Weight of Antigen	49-58kDa
Cellular Localization	Cytoplasm, Mitochondrion outer membrane, Nucleus
Species Reactivity	Human, Mouse
Positive Control	breast carcinomas or gliomas., COLO-38 or HepG2 cells. Human melanomas

*\*Optimal dilution for a specific application should be determined.*

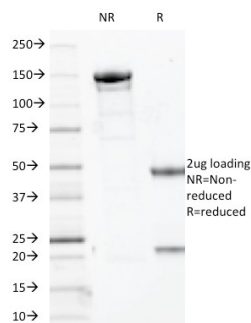
### Product Images for SOX10 (Melanoma Marker) Antibody



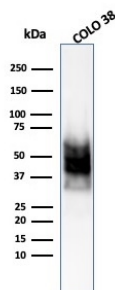
Western blot analysis of SOX10: (A) recombinant protein; (B) A375 cell lysate using SOX10 Mouse Monoclonal Antibody (SOX10/1074).



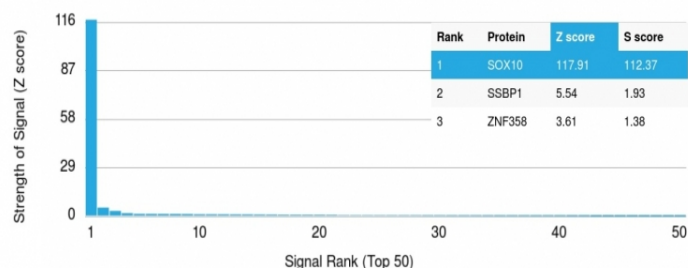
Formalin-fixed, paraffin-embedded mouse brain stained with SOX10 Mouse Monoclonal Antibody (SOX10/1074).



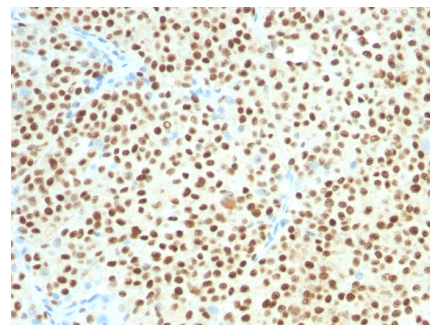
SDS-PAGE Analysis Purified SOX10 Mouse Monoclonal Antibody (SOX10/1074). Confirmation of Integrity and Purity of Antibody.



Western blot analysis of COLO-38 cell lysate using SOX10 Mouse Monoclonal Antibody (SOX10/1074).



Analysis of Protein Array containing more than 19,000 full-length human proteins using SOX10 Mouse Monoclonal Antibody (SOX10/1074) 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 HuProt™ 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 HuProt™ 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.



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

### Specificity & Comments

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.

### Research Areas

Developmental Biology, Neural Stem Cells, Nuclear Marker

### Known Applications & Suggested Dilutions

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.

### Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis.

There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

### Supplied As

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.

### Storage and Stability

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.