

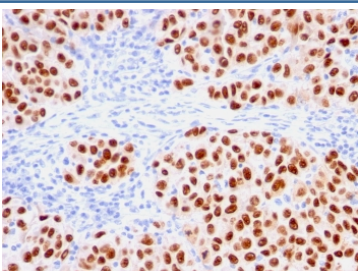
## SRY-box 10/SOX10 Antibody [clone rSOX10/1074] (V3563)

Catalog No.	Formulation	Size
V3563-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3563-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3563SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V3563IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

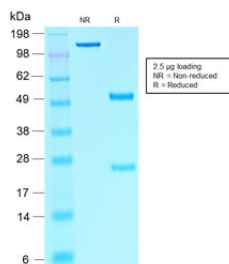
Recombinant **MOUSE MONOCLONAL**

[Bulk quote request](#)

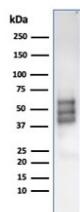
<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human, Mouse
<b>Format</b>	Purified
<b>Host</b>	Mouse
<b>Clonality</b>	Recombinant Mouse Monoclonal
<b>Isotype</b>	Mouse IgG1, kappa
<b>Clone Name</b>	rSOX10/1074
<b>Purity</b>	Protein G affinity chromatography
<b>UniProt</b>	P56693
<b>Localization</b>	Nuclear
<b>Applications</b>	Immunohistochemistry (FFPE) : 0.5-1ug/ml for 30 min at RT Western Blot : 1-2ug/ml
<b>Limitations</b>	This SRY-box 10/SOX10 antibody is available for research use only.



IHC testing of FFPE human melanoma with SRY-box 10/SOX10 antibody (clone rSOX10/1074). Required HIER: boil tissue sections in 10mM citrate buffer, pH 6, for 10-20 min followed by cooling at RT for 20 min.

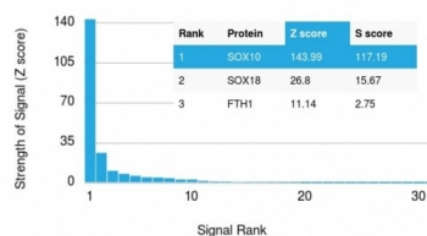


SDS-PAGE analysis of purified, BSA-free SRY-box 10/SOX10 antibody (clone rSOX10/1074) as confirmation of integrity and purity.



Western blot testing of human COLO-38 cell lysate with SRY-box 10/SOX10 antibody (clone rSOX10/1074). Expected molecular weight: 50-58 kDa.

#### Human Protein Microarray Specificity Validation



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using SRY-box 10/SOX10 antibody. These results demonstrate the foremost specificity of the rSOX10/1074 mAb. Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.

## Description

SRY-box 10 Antibody recognizes SOX10, a nuclear transcription factor encoded by the SOX10 gene and belonging to the SOX family of DNA-binding proteins. SOX10 contains a conserved HMG-box domain that allows DNA binding and transcriptional regulation of genes essential for neural crest development and differentiation. During embryogenesis, SOX10 is required for the survival and migration of neural crest cells and for their differentiation into melanocytes, Schwann cells, and enteric glial cells. Through regulation of MITF and additional lineage-associated genes, SOX10 supports melanocyte identity and pigmentation pathways. In peripheral nerves, SOX10 participates in Schwann cell differentiation and maintenance of myelin gene expression. In adult tissues, SOX10 expression is largely restricted to melanocytes within the basal layer of the epidermis and hair follicles and to Schwann cells along peripheral nerves. This restricted distribution produces characteristic nuclear staining when using SOX10 antibody in tissue sections. SOX10 has substantial relevance in cancer biology, where it is frequently expressed in melanoma and peripheral nerve sheath tumors. Nuclear SOX10 staining is often used in research to confirm melanocytic differentiation, particularly in tumors with ambiguous morphology. Expression has also been observed in subsets of basal-like breast carcinomas and salivary gland tumors, reflecting shared developmental pathways. Altered SOX10 signaling has been associated with melanoma progression and tumor cell plasticity. SRY-box 10 Antibody targeting SOX10 is suitable for detecting nuclear SOX10 expression in immunohistochemistry and related research applications focused on neural crest biology, pigmentation, and tumor studies.

## Application Notes

Optimal dilution of the SRY-box 10/SOX10 antibody should be determined by the researcher.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if

required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

## **Immunogen**

Amino acids 115-269 from the human protein were used as the immunogen for the SRY-box 10/SOX10 antibody.

## **Storage**

Store the SRY-box 10/SOX10 antibody at 2-8°C (with azide) or aliquot and store at -20°C or colder (without azide).