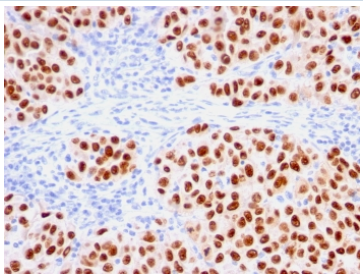
Recombinant SOX10 Antibody [clone rSOX10/1074] (V3563)

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

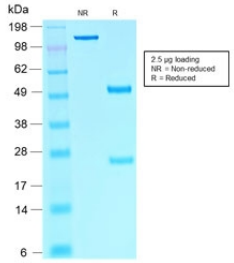
Recombinant MOUSE MONOCLONAL

Bulk quote request

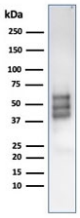
Availability	1-3 business days
Species Reactivity	Human, Mouse
Format	Purified
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	rSOX10/1074
Purity	Protein G affinity chromatography
UniProt	P56693
Localization	Nuclear
Applications	Immunohistochemistry (FFPE) : 0.5-1ug/ml for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



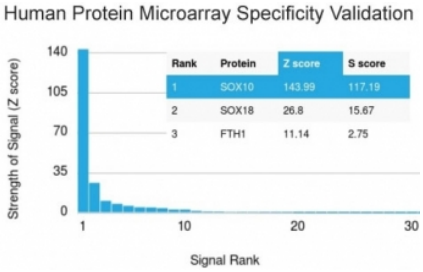
IHC testing of FFPE human melanoma with recombinant SOX10 antibody (clone rSOX10/1074). Required HIER: boil tissue sections in 10mM citrate buffer, pH 6, for 10-20 min followed by cooling at RT for 20 min.



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



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



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using recombinant 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

Recombinant SOX10 antibody is a reliable reagent for studying the transcription factor SOX10, a member of the SRY related HMG box family. SOX10 is critical for neural crest development, guiding the specification of melanocytes, Schwann cells, and oligodendrocytes. It regulates transcriptional programs that determine lineage fate, survival, and differentiation. Because of these functions, SOX10 has become central to research in developmental biology, neuroscience, and oncology.

SOX10 exerts its influence by binding DNA at specific motifs through its HMG domain. It partners with other transcription factors to regulate genes involved in pigment production, glial function, and myelination. Mutations in SOX10 are associated with syndromes such as Waardenburg and Hirschsprung, conditions that highlight its importance in embryonic patterning and tissue maintenance. Its regulatory reach spans both developmental and disease related processes.

The Recombinant SOX10 antibody clone rSOX10/1074 provides accurate and reproducible detection of this transcription factor. Recombinant production enhances batch consistency, eliminating variability that can compromise experimental results. Clone rSOX10/1074 has been employed in studies mapping neural crest lineages, assessing glial differentiation, and classifying tumors derived from melanocytes and Schwann cells. Its nuclear localization pattern supports precise detection in tissues and cell preparations.

In pathology, SOX10 is a sensitive marker for melanoma and peripheral nerve sheath tumors. Research with clone rSOX10/1074 has clarified how SOX10 expression distinguishes these neoplasms from other tumor types, making it indispensable for diagnostic applications. In neuroscience, it continues to aid studies on oligodendrocyte biology and the mechanisms of myelin repair, advancing knowledge in conditions such as multiple sclerosis.

NSJ Bioreagents supplies this Recombinant SOX10 antibody to support investigations into developmental biology,

neurobiology, and oncology. The protein is also described as transcription factor SOX10 antibody, SRY related HMG box 10 antibody, Waardenburg syndrome gene antibody, and neural crest transcription regulator antibody, reflecting the varied nomenclature used in the scientific community.

Application Notes

Optimal dilution of the recombinant 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 recombinant SOX10 antibody.

Storage

Store the recombinant SOX10 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).