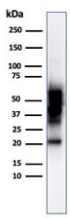
SOX10 Antibody / Neural Crest Marker [clone SOX10/992] (V8813)

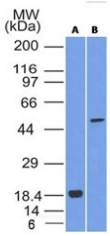
Catalog No.	Formulation	Size
V8813-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V8813-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V8813SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

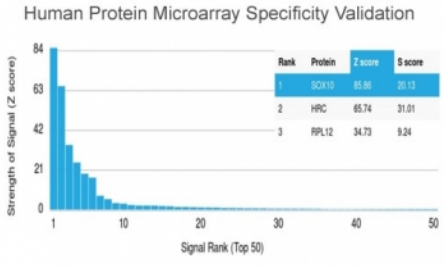
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	SOX10/992
Purity	Protein A/G affinity
UniProt	P56693
Localization	Nuclear
Applications	ELISA (For Coating Purchase Antibody Without BSA) : Western Blot : 1-2ug/ml
Limitations	This SOX10/Neural Crest Marker antibody is available for research use only.



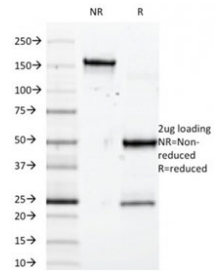
Western blot testing of human COLO-38 cell lysate using SOX10/Neural Crest Marker antibody (clone SOX10/992). Expected molecular weight: 50-58 kDa.



Western blot analysis of SOX10 (A) recombinant protein and (B) human A375 cell lysate using SOX10/Neural Crest Marker antibody (clone SOX10/992). Expected molecular weight: 50-58 kDa.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using SOX10/Neural Crest Marker antibody (clone SOX10/992). These results demonstrate the foremost specificity of the SOX10/992 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.



SDS-PAGE analysis of purified, BSA-free SOX10/Neural Crest Marker antibody (SOX10/992) as confirmation of integrity and purity.

Description

SOX10 Antibody recognizes Neural Crest Marker, a transcription factor encoded by the SOX10 gene that belongs to the SOX family of HMG-box DNA-binding proteins. SOX10 functions primarily within the nucleus, where it regulates transcriptional programs governing neural crest specification and differentiation. The conserved HMG-box domain allows SOX10 to bind DNA and modulate gene expression necessary for melanocyte and peripheral glial development. During embryogenesis, SOX10 is indispensable for neural crest cell survival and migration, directing differentiation toward melanocytic, Schwann cell, and enteric glial lineages. Through activation of MITF and other lineage-specific transcription factors, SOX10 supports pigmentation pathways and melanocyte identity. In peripheral nerves, SOX10 contributes to Schwann cell maturation and myelin gene regulation, coordinating with signaling cascades such as neuregulin and Notch. In adult tissues, SOX10 expression remains largely confined to melanocytes in the epidermis and hair follicles and to Schwann cells associated with peripheral nerves. This restricted pattern makes SOX10 antibody a sensitive marker for neural crest-derived cells. In diagnostic and translational research settings, SOX10 is widely studied in melanoma, malignant peripheral nerve sheath tumors, and clear cell sarcoma, where nuclear staining supports lineage identification. SOX10 expression is also observed in subsets of breast carcinoma and salivary gland tumors, particularly those demonstrating basal or myoepithelial differentiation. Because SOX10 expression is tightly linked to neural crest biology, its detection can provide insight into tumor differentiation status and cellular origin. Neural Crest Marker Antibody targeting SOX10 is therefore suitable for immunohistochemical detection and related laboratory applications focused on developmental pathways, pigmentation biology, and cancer characterization.

Application Notes

Optimal dilution of the SOX10/Neural Crest Marker antibody should be determined by the researcher.

Immunogen

A portion of amino acids 115-269 was used as the immunogen for the SOX10/Neural Crest Marker antibody.

Storage

Aliquot the SOX10/Neural Crest Marker antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.