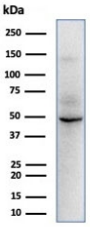
SOX9 Antibody for WB / SOX9 Western Blot Antibody [clone SOX9/2398] (V7459)

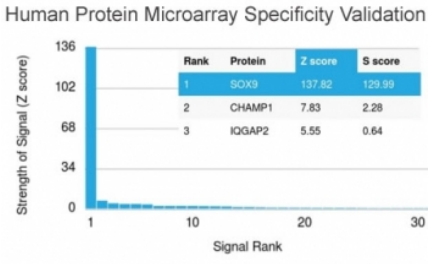
Catalog No.	Formulation	Size
V7459-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7459-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7459SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V7459IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Bulk quote request

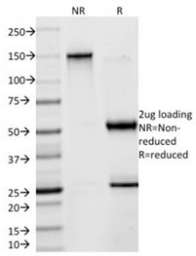
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	SOX9/2398
Purity	Protein G affinity chromatography
UniProt	P48436
Localization	Nuclear
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT Western Blot : 1-2ug/ml
Limitations	This SOX9 Antibody for WB / SOX9 Western Blot Antibody antibody is available for research use only.



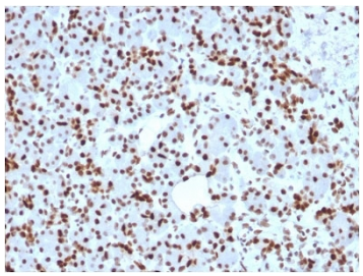
SOX9 Antibody Human HepG2 WB. Western blot analysis of human HepG2 hepatocellular carcinoma cell lysate using SOX9 Antibody for WB. Mouse monoclonal antibody clone SOX9/2398 detects a band at approximately 48-50 kDa, slightly lower than the predicted molecular weight of SOX9 (56-65 kDa). SOX9 is a nuclear transcription factor involved in differentiation and cancer-associated signaling, and its detection in HepG2 cells supports expression in hepatic tumor models. The lower apparent molecular weight may reflect protein processing, isoform variation, or differences in electrophoretic migration.



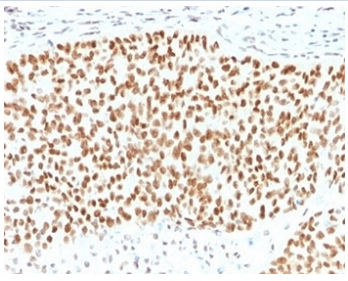
Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using SOX9/Transcription factor SOX-9 antibody. These results demonstrate the foremost specificity of the SOX9/2398 mAb.
Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination 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 SOX9/Transcription factor SOX-9 antibody as confirmation of integrity and purity.



Immunohistochemistry analysis of SOX9 / Transcription factor SOX-9 antibody in human pancreas tissue. FFPE human pancreas sections show strong HRP-DAB brown nuclear staining in ductal epithelial cells and scattered epithelial cell populations, consistent with nuclear localization of SOX-9 as a transcription factor. Surrounding acinar cells demonstrate minimal background staining, while stromal elements are largely negative. The staining pattern highlights SOX-9 expression within pancreatic ductal structures and progenitor-associated compartments. Heat induced epitope retrieval was performed in 10 mM Tris with 1 mM EDTA, pH 9.0, by boiling for 10-20 minutes followed by cooling at room temperature for 20 minutes prior to antibody incubation.



IHC staining of FFPE human pancreas with SOX9/Transcription factor SOX-9 antibody. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.

Description

SRY-box transcription factor 9 (SOX9) is a nuclear transcription factor that regulates developmental processes, epithelial differentiation, and cellular plasticity, with well-established roles in cancer progression and lineage control. SOX9 Antibody for WB is widely used to detect SOX9 protein expression and monitor changes in transcription factor levels across experimental systems. SOX9 Antibody for WB / SOX9 Western Blot Antibody enables reliable identification of

SOX9 in cell lysates and tissue extracts, supporting protein-level analysis of transcriptional regulation.

In western blot applications, SOX9 is typically detected as a distinct band in the range of approximately 56-65 kDa, corresponding to its predicted molecular weight, although migration at slightly lower apparent molecular weights may be observed depending on sample context. SOX9 antibody, also known as SRY-box transcription factor 9 antibody, provides clear and reproducible detection across a variety of sample types, including epithelial cells, stem-like populations, and cancer-derived cell lines. This consistent banding pattern supports confident identification of SOX9 expression and enables comparison across experimental conditions.

Western blot analysis of SOX9 is particularly valuable for evaluating changes in protein abundance associated with differentiation, lineage commitment, and tumor progression. Increased SOX9 expression is frequently observed in cancer models characterized by enhanced proliferation, epithelial plasticity, and stem-like phenotypes. SOX9 Antibody for WB supports quantitative assessment of these expression changes, allowing researchers to correlate transcription factor levels with biological outcomes.

This antibody has been evaluated using human protein microarray-based specificity validation, demonstrating highly selective binding to SOX9 with minimal off-target reactivity across a broad panel of human proteins. The strong signal enrichment for SOX9 relative to other targets supports high specificity, reinforcing confidence in western blot band identification and reducing the likelihood of non-specific detection in complex lysates.

In addition to total protein detection, SOX9 may exhibit variation in apparent molecular weight due to post-translational modifications such as phosphorylation or protein processing, which can influence transcriptional activity and protein stability. Multiple bands or slight shifts in migration may therefore be observed depending on cellular context and experimental conditions. SOX9 Antibody for WB enables detection of these variations, providing insight into functional regulation of the protein.

SOX9 operates downstream of key signaling pathways including Wnt/beta-catenin, Notch, Hedgehog, and TGF-beta, integrating signals that regulate cell fate decisions and transcriptional programs. Western blot analysis of SOX9 expression is therefore commonly used in studies investigating pathway activation, transcriptional control, and disease-associated signaling changes.

Overall, SOX9 Antibody for WB is well suited for detecting SOX9 protein expression and analyzing transcription factor regulation in diverse biological systems. Its clear banding profile, validated specificity, and compatibility with western blot assays make it a valuable tool for studies of differentiation, development, and cancer-associated signaling.

This SOX9 antibody is part of a broader SOX9 antibody panel offered by NSJ Bioreagents.

Application Notes

Optimal dilution of the SOX9 Antibody for WB / SOX9 Western Blot 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

A portion of amino acids 393-508 from the human protein was used as the immunogen for the SOX9/Transcription factor SOX-9 antibody.

Storage

Store the SOX9/Transcription factor SOX-9 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

SOX9 antibody, SRY-box transcription factor 9 antibody, SOX9 western blot antibody, SOX9 WB antibody, SOX9 protein detection antibody