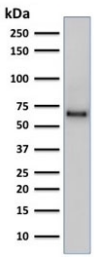
SOX9 Antibody / Cancer Stem Cell Marker Antibody [clone SOX9/2387] (V8917)

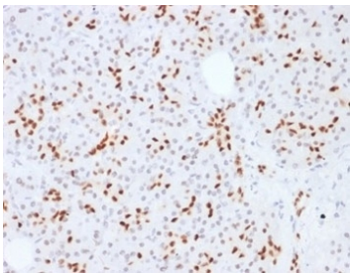
Catalog No.	Formulation	Size
V8917-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V8917-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V8917SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

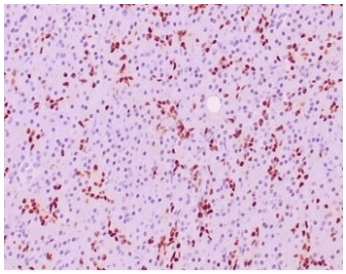
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	SOX9/2387
Purity	Protein A/G affinity
UniProt	P48436
Localization	Nucleus
Applications	Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This SOX9 Antibody / Cancer Stem Cell Marker Antibody is available for research use only.



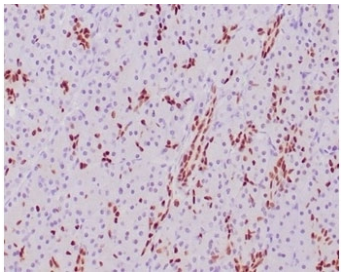
SOX9 Antibody Human PC-3 Cancer Cell WB. Western blot analysis of human PC-3 prostate cancer cell lysate using SOX9 Antibody. Recombinant monoclonal antibody clone SOX9/2387 detects a distinct band at approximately 56-65 kDa, consistent with the predicted molecular weight of SOX9. SOX9 is a nuclear transcription factor associated with cancer stem cell regulation and differentiation, and expression in PC-3 cells aligns with its role in tumor progression. Minor variation in apparent molecular weight may reflect post-translational modifications or protein processing.



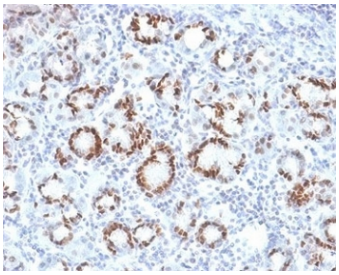
SOX9 Antibody Pancreas IHC. Immunohistochemistry analysis of FFPE human pancreatic tissue using SOX9 Antibody. The recombinant monoclonal antibody clone SOX9/2387 demonstrates strong nuclear HRP-DAB brown staining in ductal epithelial cells and scattered progenitor-like cell populations, consistent with SOX9â€™s role as a transcription factor and cancer stem cell-associated marker. Minimal staining is observed in surrounding stromal components. Heat-induced epitope retrieval was performed using pH 9 Tris-EDTA buffer, supporting robust nuclear signal detection in pancreatic tissue.



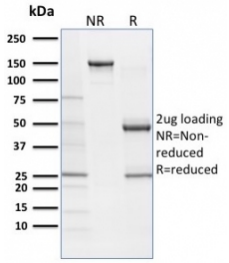
IHC staining of FFPE human pancreatic tissue with SOX9 antibody (clone SOX9/2387) at 2ug/ml. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



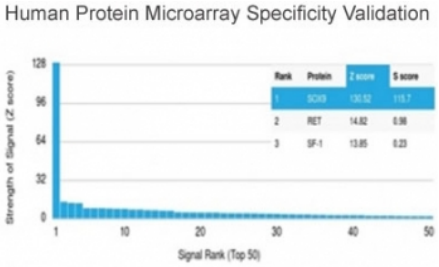
IHC staining of FFPE human pancreatic tissue with SOX9 antibody (clone SOX9/2387) at 2ug/ml. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SOX9 Antibody Gastric Cancer IHC. Immunohistochemistry analysis of FFPE human gastric carcinoma tissue using SOX9 Antibody. The recombinant monoclonal antibody clone SOX9/2387 demonstrates strong nuclear HRP-DAB brown staining in tumor epithelial cells, with focal enrichment in gland-forming regions, consistent with SOX9 expression in proliferative and progenitor-like tumor compartments. Surrounding stromal cells show minimal staining. The observed pattern supports SOX9â€™s role as a cancer stem cell-associated transcription factor in gastric carcinoma. Heat-induced epitope retrieval was performed using pH 9 Tris-EDTA buffer to optimize nuclear antigen detection.



SDS-PAGE analysis of purified, BSA-free SOX9 antibody (clone SOX9/2387) as confirmation of integrity and purity.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using SOX9 antibody (clone SOX9/2387). These results demonstrate the foremost specificity of the SOX9/2387 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 transcription factor 9 (SOX9) is a nuclear transcription factor that plays a central role in embryonic development, lineage specification, and maintenance of progenitor cell populations, where it regulates gene expression programs controlling differentiation and cellular plasticity. SOX9 Antibody is widely used to investigate transcriptional networks associated with stem-like states and has become an important marker in cancer research due to its involvement in tumor initiation, progression, and resistance mechanisms.

SOX9 Antibody / Cancer Stem Cell Marker Antibody is particularly valuable for studying cancer stem cell biology, where SOX9 expression is frequently enriched in tumor-initiating cell populations that exhibit self-renewal capacity and resistance to chemotherapy and radiation. SOX9 antibody, also known as SRY-box transcription factor 9 antibody, is commonly used to identify these subpopulations across a range of malignancies, including colorectal, pancreatic, lung, ovarian, and prostate cancers, where elevated SOX9 expression correlates with aggressive tumor behavior and poor clinical outcomes.

Mechanistically, SOX9 functions downstream of key developmental signaling pathways including Wnt/beta-catenin, Notch, and Hedgehog, integrating extracellular signals to promote stemness while suppressing terminal differentiation. In tumor contexts, aberrant activation of SOX9 contributes to epithelial-mesenchymal transition (EMT), enhanced migratory capacity, and increased invasive potential. SOX9 Antibody enables detection of nuclear SOX9 in experimental systems investigating these processes, supporting studies of tumor plasticity, metastatic progression, and transcriptional reprogramming.

In addition to its role in cancer stem cell maintenance, SOX9 is associated with glandular differentiation and tissue remodeling, particularly in organs such as pancreas, intestine, and lung. Tumor regions exhibiting active proliferation and structural reorganization often show increased SOX9 expression, reflecting its role in maintaining progenitor-like phenotypes within dynamic tumor microenvironments. SOX9 Antibody supports identification of these biologically relevant cell populations and facilitates analysis of tumor heterogeneity.

Beyond oncology, SOX9 is essential for normal developmental processes including chondrogenesis, gonadal development, and organogenesis, highlighting its role as a master regulator of lineage commitment. Its reactivation in cancer underscores the overlap between developmental signaling pathways and tumor biology. SOX9 Antibody provides a robust tool for examining these shared mechanisms in both normal and disease states.

Overall, SOX9 Antibody is well suited for investigating transcriptional regulation, cancer stem cell signaling, and cellular plasticity. Its strong association with stemness pathways and tumor progression makes it a valuable reagent for research focused on tumor initiation, therapeutic resistance, and identification of novel targets in oncology.

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

Application Notes

Optimal dilution of the SOX9 Antibody / Cancer Stem Cell Marker Antibody should be determined by the researcher.

Immunogen

A portion of amino acids 393-508 was used as the immunogen for the SOX9 antibody.

Storage

Aliquot the SOX9 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

SOX9 antibody, SRY-box transcription factor 9 antibody, SOX9 stem cell marker antibody, SOX9 cancer marker antibody, SOX9 transcription factor antibody

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