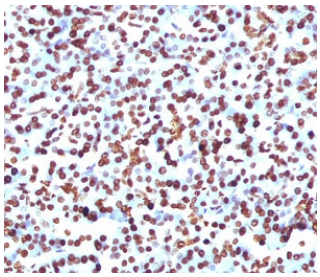
SOX9 Antibody / Tumor Progression Marker Antibody [clone SRYB9-1] (V7467)

Catalog No.	Formulation	Size
V7467-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7467-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7467SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V7467IHC-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	SRYB9-1
Purity	Protein G affinity chromatography
UniProt	P48436
Localization	Nuclear
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT Prediluted IHC only format: incubate for 30 min at RT (1)
Limitations	This SOX9 Antibody / Tumor Progression Marker Antibody is available for research use only.



SOX9 Antibody Pancreas Tumor Progression IHC. Immunohistochemistry analysis of FFPE human pancreas using SOX9 Antibody. Mouse monoclonal antibody clone SRYB9-1 demonstrates strong nuclear HRP-DAB brown staining in epithelial cell populations, consistent with SOX9 expression in proliferative and tumor progression-associated compartments. Staining highlights clusters of cells with increased nuclear signal, while surrounding stromal elements show minimal reactivity, providing clear contrast. The observed pattern supports SOX9 as a tumor progression marker in pancreatic tissue. Heat-induced epitope retrieval was performed using pH 9 Tris-EDTA buffer to optimize nuclear antigen detection.

Description

SRY-box transcription factor 9 (SOX9) is a nuclear transcription factor that regulates developmental pathways, epithelial identity, and cellular plasticity, and is widely implicated in tumor progression across a broad range of malignancies. SOX9 Antibody is commonly used to investigate transcriptional programs associated with tumor growth, invasion, and disease advancement. SOX9 Antibody / Tumor Progression Marker Antibody enables sensitive detection of nuclear SOX9 expression in tumor cell populations undergoing active expansion and phenotypic remodeling.

In immunohistochemistry applications, SOX9 demonstrates strong and consistent nuclear staining in proliferative tumor compartments, particularly within poorly differentiated regions and at invasive tumor margins. SOX9 antibody, also known as SRY-box transcription factor 9 antibody, is frequently enriched in areas of architectural disruption where tumor cells exhibit increased plasticity and adaptation to the surrounding microenvironment. In formalin-fixed, paraffin-embedded (FFPE) tissues, this distinct nuclear localization allows clear identification of biologically active tumor subpopulations. In tissue microarray (TMA) analysis, reproducible nuclear labeling across multiple cores supports high-confidence comparison of SOX9 expression across tumor types, grades, and patient cohorts.

Functionally, SOX9 operates downstream of major oncogenic signaling pathways including Wnt/beta-catenin, TGF-beta, Notch, and Hedgehog, coordinating transcriptional programs that promote proliferation, survival, and resistance to terminal differentiation. Its activity supports expansion of progenitor-like tumor cells and facilitates adaptation to hypoxic and nutrient-limited conditions within the tumor microenvironment. SOX9 Antibody enables visualization of these transcriptionally active populations, providing insight into intratumoral heterogeneity and progression dynamics.

Elevated SOX9 expression has been documented in pancreatic, colorectal, lung, ovarian, prostate, and gastric cancers, where it correlates with higher tumor grade, invasive behavior, and unfavorable clinical outcome. Nuclear SOX9 staining is often most prominent in regions of active tumor expansion and structural disorganization, reinforcing its role as a marker of disease progression. SOX9 Antibody supports detection of these patterns in both individual tissue sections and high-throughput TMA formats, enabling consistent cross-sample evaluation of progression-associated expression profiles.

In addition to its role in cancer, SOX9 is essential for normal developmental processes including chondrogenesis and organogenesis, reflecting its function as a master regulator of lineage commitment. Its reactivation in tumor contexts highlights the convergence of developmental signaling pathways and oncogenic transformation. SOX9 Antibody provides a robust and reproducible tool for examining these shared mechanisms in both normal and pathological tissues.

Overall, SOX9 Antibody is well suited for immunohistochemical detection of tumor progression-associated transcriptional activity. Its strong nuclear staining pattern, spatial enrichment in invasive tumor regions, and reproducibility in TMA-based analysis make it particularly valuable for studying tumor growth, progression, and disease severity.

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

Application Notes

The stated application concentrations are suggested starting points. Titration of the SOX9 Antibody / Tumor Progression Marker Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

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 antibody.

Storage

Store the SOX9 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 tumor progression marker antibody, SOX9 cancer progression antibody, SOX9 immunohistochemistry antibody

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