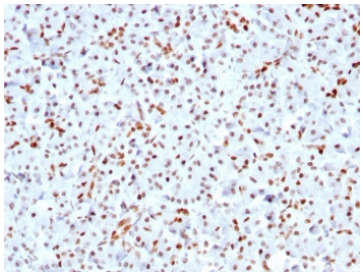
SOX9 Antibody / Pancreatic Ductal Marker Antibody [clone SOX9/3141R] (V8091)

Catalog No.	Formulation	Size
V8091-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8091-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8091SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

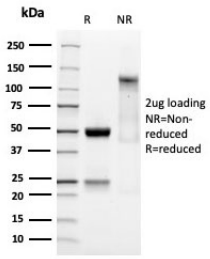
Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	SOX9/3141R
Purity	Protein A affinity chromatography
UniProt	P48436
Localization	Nuclear
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This SOX9 Antibody / Pancreatic Ductal Marker Antibody is available for research use only.



SOX9 Antibody Pancreas IHC. Immunohistochemistry analysis of FFPE human pancreas using SOX9 Antibody. Recombinant rabbit monoclonal antibody clone SOX9/3141R demonstrates strong nuclear HRP-DAB brown staining in pancreatic ductal epithelial cells, clearly highlighting ductal structures within the gland. Acinar cells and surrounding stromal components show minimal staining, supporting specificity for ductal lineage. The observed pattern is consistent with SOX9â€™s role as a pancreatic ductal marker and regulator of epithelial differentiation. Heat-induced epitope retrieval was performed using pH 9 Tris-EDTA buffer to optimize nuclear antigen detection.



SDS-PAGE analysis of purified, BSA-free recombinant SOX9 Antibody / Pancreatic Ductal Marker Antibody as confirmation of integrity and purity.

Description

SRY-box transcription factor 9 (SOX9) is a nuclear transcription factor that plays a central role in epithelial differentiation, organogenesis, and maintenance of progenitor cell populations, with particularly strong and consistent expression in pancreatic ductal epithelium. SOX9 Antibody is widely used to investigate epithelial lineage identity and is especially valuable as a pancreatic ductal marker in tissue-based studies. SOX9 Antibody / Pancreatic Ductal Marker Antibody enables precise identification of ductal epithelial cells within complex glandular tissues, supporting detailed histological and pathological evaluation.

In immunohistochemistry applications, SOX9 demonstrates robust nuclear staining in ductal epithelial cells of the pancreas, providing clear contrast with acinar and endocrine compartments that typically show minimal or absent signal. SOX9 antibody, also known as SRY-box transcription factor 9 antibody, is therefore commonly used to delineate ductal architecture in formalin-fixed, paraffin-embedded (FFPE) specimens. This distinct staining pattern is particularly useful in tissue microarray (TMA) analysis, where consistent nuclear labeling across multiple cores allows for comparative assessment of ductal differentiation across large panels of normal and diseased tissues.

SOX9 is a key regulator of pancreatic development and regeneration, maintaining ductal cell identity and supporting epithelial plasticity during injury and repair. In pathological contexts, SOX9 expression is frequently upregulated in pancreatic ductal adenocarcinoma (PDAC) and precursor lesions, where it contributes to tumor progression, dedifferentiation, and expansion of progenitor-like cell populations. SOX9 Antibody supports detection of these changes, enabling visualization of ductal lineage expansion and altered epithelial states in tumor tissue.

Beyond the pancreas, SOX9 is expressed in additional glandular and epithelial tissues including the gastrointestinal tract and biliary system, where it plays a role in maintaining epithelial integrity and regenerative capacity. However, its strong and reproducible nuclear staining in pancreatic ductal cells makes it particularly well suited as a lineage marker in this organ. In TMA-based studies, this allows for reliable comparison of SOX9 expression across diverse tissue types and disease states, including evaluation of tumor-associated epithelial remodeling.

In cancer research, SOX9 expression often correlates with aggressive tumor features, including enhanced proliferation, epithelial plasticity, and resistance to differentiation. Its involvement in transcriptional programs regulating epithelial identity underscores its importance in both normal development and malignancy. SOX9 Antibody provides a robust and reproducible tool for examining these processes in FFPE tissue sections and high-throughput tissue microarray formats.

Overall, SOX9 Antibody is well suited for immunohistochemical detection of pancreatic ductal epithelium and for studying epithelial differentiation, lineage specification, and tumor-associated changes. Its strong nuclear staining pattern and relevance to pancreatic pathology make it particularly valuable for TMA-based comparative tissue analysis and histopathological research.

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

Application Notes

Optimal dilution of the SOX9 Antibody / Pancreatic Ductal Marker Antibody should be determined by the researcher.

Immunogen

A recombinant human partial protein (amino acids 393-508) was used as the immunogen for the recombinant SOX9 antibody.

Storage

Store the recombinant 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 pancreatic marker antibody, SOX9 ductal marker antibody, SOX9 immunohistochemistry antibody