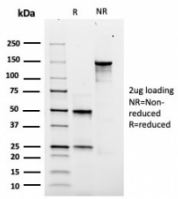
SOX9 Antibody / SRY-box 9 [clone rSOX9/2288] (V5556)

Catalog No.	Formulation	Size
V5556-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5556-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5556SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Recombinant | MOUSE MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1
Clone Name	rSOX9/2288
Purity	Protein A/G affinity
UniProt	P48436
Localization	Nucleus
Applications	Immunohistochemistry (FFPE): 1-2ug/ml Western blot: 2-4ug/ml
Limitations	This SOX9 antibody is available for research use only.



SDS-PAGE analysis of purified, BSA-free recombinant SOX9 antibody (clone rSOX9/2288) as confirmation of integrity and purity.

Description

SOX9 antibody recognizes SRY-box transcription factor 9, encoded by the SOX9 gene and commonly referred to as SRY-

box 9. SOX9 is a high mobility group box transcription factor that localizes to the nucleus and functions as a key regulator of cell fate determination and differentiation. SOX9 antibody detects this developmentally critical transcription factor that is expressed in chondrocytes, Sertoli cells, and multiple epithelial progenitor populations.

Structurally, SOX9 contains a conserved high mobility group DNA-binding domain that enables sequence-specific binding to regulatory elements within target genes. Through interaction with cofactors and chromatin remodeling complexes, SOX9 regulates transcriptional programs controlling cartilage formation, sex determination, and organ development. In the developing gonad, SOX9 acts downstream of SRY and is essential for testis differentiation. In skeletal development, it drives chondrogenic gene expression and extracellular matrix production.

SOX9 is also expressed in epithelial tissues such as pancreas, liver, intestine, and lung, where it marks progenitor or stem-like cell populations. Dysregulation of SOX9 has been associated with developmental disorders, including campomelic dysplasia, as well as with tumorigenesis in various cancers. In carcinoma biology, SOX9 expression is often linked to stemness features, epithelial-mesenchymal transition programs, and tumor progression.

The SOX9 gene is located on chromosome 17 and encodes a nuclear transcription factor that is tightly regulated during embryogenesis and tissue repair. Because SOX9 functions within the nucleus, immunohistochemical detection typically demonstrates nuclear staining in positive cells, consistent with its role as a transcriptional regulator.

The SOX9 antibody (Clone rSOX9/2288) is a recombinant monoclonal antibody suitable for detecting SOX9 protein expression in research applications. This SRY-box 9 antibody supports studies of developmental biology, chondrogenesis, stem cell biology, and cancer-related transcriptional regulation.

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

Application Notes

Optimal dilution of the SOX9 antibody should be determined by the researcher.

Immunogen

Recombinant human full-length SOX9 protein 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.

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