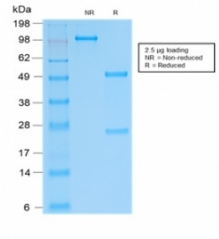
SOX9 Antibody / SRY-box transcription factor 9 [clone SOX9/2287R] (V9137)

Catalog No.	Formulation	Size
V9137-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9137-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9137SAF-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
Clone Name	SOX9/2287R
Purity	Protein A/G affinity
UniProt	P48436
Localization	Nuclear
Applications	ELISA (order BSA-free format for coating)
Limitations	This SOX9/SRY-box transcription factor 9 antibody is available for research use only.



SDS-PAGE analysis of purified, BSA-free SOX9/SRY-box transcription factor 9 antibody (clone SOX9/2287R) 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 nuclear transcription factor belonging to the SRY-related HMG-box family and functions as a master regulator of lineage commitment and differentiation in multiple tissues. SOX9 antibody detects this DNA-binding protein that localizes to the nucleus and controls gene expression programs critical for development and tissue homeostasis.

SOX9 contains a conserved high mobility group DNA-binding domain that allows sequence-specific interaction with target promoters and enhancers. Through cooperation with transcriptional co-activators and chromatin remodeling complexes, SOX9 regulates genes involved in extracellular matrix production, cellular differentiation, and organ morphogenesis. It plays a pivotal role in chondrogenesis by activating cartilage-specific genes such as COL2A1 and aggrecan, and it is essential for skeletal development.

Beyond cartilage biology, SOX9 is a key determinant of sex differentiation. During embryogenesis, SOX9 expression in the developing gonad promotes testis formation and Sertoli cell differentiation. Mutations in SOX9 are associated with campomelic dysplasia and disorders of sex development, underscoring its importance in developmental regulation.

SOX9 is also expressed in epithelial progenitor populations in tissues including pancreas, liver, intestine, and lung. In these contexts, it is frequently associated with stem or progenitor cell compartments and may contribute to tissue regeneration and repair. In cancer research, SOX9 expression has been linked to tumor progression, epithelial-mesenchymal transition programs, and maintenance of stem-like features in several carcinoma types.

The SOX9 gene is located on chromosome 17 and encodes a tightly regulated nuclear protein whose expression is context dependent across developmental stages and adult tissues. Because SOX9 functions as a transcription factor, immunohistochemical analysis typically demonstrates nuclear staining in positive cells, consistent with its biological role.

The recombinant SOX9 antibody (Clone SOX9/2287R) is suitable for detecting SOX9 protein expression in research applications. This antibody supports studies of developmental biology, cartilage formation, sex determination pathways, progenitor cell biology, and transcriptional regulation in disease models.

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

Application Notes

Optimal dilution of the SOX9/SRY-box transcription factor 9 antibody should be determined by the researcher.

Immunogen

Recombinant human full-length SOX9 protein was used as the immunogen for the SOX9/SRY-box transcription factor 9 antibody.

Storage

Aliquot the SOX9/SRY-box transcription factor 9 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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