Decorin Antibody for IHC / DCN Antibody [clone MSVA-537R] (V6066)

Catalog No.	Formulation	Size
V6066-100UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V6066-20UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	20 ug

Recombinant RABBIT MONOCLONAL

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	MSVA-537R
UniProt	P07585
Localization	Extracellular matrix, Extracellular space, Secreted
Applications	IHC
Limitations	This DCN/Decorin antibody is available for research use only.



Decorin Antibody for IHC Tissue Microarray (TMA). Immunohistochemistry analysis of Decorin DCN in formalin-fixed paraffin-embedded human normal and cancer tissue microarrays using recombinant rabbit monoclonal Decorin antibody clone MSVA-537R. Tissue microarray (TMA) staining with HRP-DAB brown chromogen demonstrates predominant localization within stromal extracellular matrix compartments, highlighting collagen-rich connective tissue surrounding glands, vessels, and muscle bundles, while epithelial and parenchymal cells remain largely negative. Within tumor tissue microarrays, variable stromal staining intensity is observed in tumor-associated connective tissue, consistent with extracellular matrix remodeling. Evaluation across large TMA panels enables direct comparison of Decorin expression across diverse tissue types under standardized conditions. The observed staining patterns align with reported DCN expression profiles in the Human Protein Atlas, supporting its use in extracellular matrix and stromal biology studies.

Description

Decorin Antibody for IHC detects Decorin (DCN), a small leucine-rich extracellular matrix proteoglycan encoded by the DCN gene and widely distributed in connective tissues. Clone MSVA-537R is a recombinant monoclonal antibody

developed for immunohistochemistry and supports visualization of Decorin within stromal extracellular matrix compartments of formalin-fixed tissue sections. This antibody is part of a broader collection of IHC antibodies validated by tissue microarray analysis, supporting consistent staining across normal and cancer tissues.

Decorin antibody, also referred to as DCN antibody and small leucine-rich proteoglycan Decorin antibody in the literature, recognizes a secreted proteoglycan characterized by tandem leucine-rich repeat domains and a single dermatan sulfate or chondroitin sulfate glycosaminoglycan chain. Decorin binds to fibrillar collagens, particularly type I collagen, where it regulates collagen fibrillogenesis, fiber diameter, and interfibrillar spacing. Through these interactions, Decorin contributes to tissue tensile strength and extracellular matrix stability.

Beyond structural support, Decorin modulates cellular signaling pathways through interactions with growth factors and receptor tyrosine kinases, including transforming growth factor beta and epidermal growth factor receptor. These regulatory effects influence cell proliferation, differentiation, and migration, positioning Decorin as both a matrix scaffold and a signaling modulator within the tissue microenvironment. Decorin expression is prominent in skin, tendon, ligament, placenta, prostate stroma, and other collagen-rich tissues. A Decorin Antibody for IHC typically demonstrates extracellular stromal staining between collagen bundles and surrounding glandular or vascular structures and is commonly used to evaluate extracellular matrix organization, fibrosis, and tumor-associated desmoplastic responses.

Altered Decorin expression has been associated with fibrosis, abnormal wound healing, and tumor progression, where remodeling of collagen architecture and stromal signaling contributes to disease development. Assessment of Decorin distribution may therefore support research into extracellular matrix biology, connective tissue organization, and tumor microenvironment remodeling. This Decorin Antibody for IHC targets Decorin in research applications and is available from NSJ Bioreagents.

This antibody can be compared with our Decorin Antibody (clone DCN/3521) for consistent detection of DCN across extracellular matrix and proteoglycan biology studies.

Application Notes

1. Optimal dilution of the DCN/Decorin antibody should be determined by the researcher.

2. This DCN antibody for IHC is recombinantly produced by expression in CHO cells.

3. Manual Protocol: Freshly cut sections should be used (less than 10 days between cutting and staining). Heat-induced antigen retrieval for 5 minutes in an autoclave at 121oC in pH 7.8 Target Retrieval Solution buffer. Apply the antibody at a dilution of 1:150 at 37oC for 60 minutes. Visualization of bound antibody by the EnVision Kit (Dako, Agilent) according to the manufacturer's directions.

4. For immunostaining, pre-incubation with chondroitinase-SBC or testicular hyaluronidase may be required to expose the epitope.

Immunogen

Recombinant human Decorin protein fragment (around amino acids 212-336) (exact sequence is proprietary) was used as the immunogen for the Decorin antibody for IHC.

Storage

DCN/Decorin antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.

Alternate Names

DNC Antibody for IHC, Decorin Immunohistochemistry Antibody, Bone proteoglycan II antibody, CSCD Antibody

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