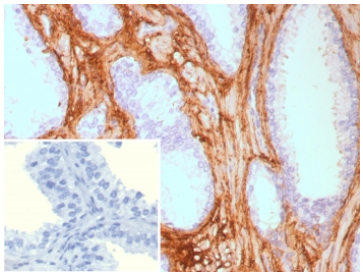
DCN Antibody Recombinant Mouse MAb / Decorin [clone rDCN/9075] (V4313)

Catalog No.	Formulation	Size
V4313-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4313-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4313SAF-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 IgG2b, kappa
Clone Name	rDCN/9075
Purity	Protein A/G affinity
UniProt	P07585
Localization	Secreted
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 minutes at RT
Limitations	This DCN antibody is available for research use only.



Immunohistochemistry of DCN antibody in human prostate carcinoma tissue. Formalin-fixed, paraffin-embedded human prostate carcinoma was stained using recombinant mouse monoclonal DCN antibody (clone rDCN/9075). Heat induced epitope retrieval was performed by boiling tissue sections in 10mM Tris with 1mM EDTA, pH 9, for 20 min followed by cooling prior to staining. HRP-DAB brown chromogenic signal highlights extracellular stromal matrix surrounding malignant glands, consistent with Decorin localization within collagen-rich connective tissue. The inset shows PBS used in place of primary antibody as a secondary-only negative control.

Description

DCN Antibody Recombinant Mouse MAb detects Decorin, a small leucine-rich extracellular matrix proteoglycan encoded

by the DCN gene and broadly expressed in connective tissues. Clone rDCN/9075 is a recombinant mouse monoclonal antibody developed for consistent research performance and supports evaluation of stromal matrix organization and collagen-associated structures in tissue specimens.

DCN antibody, also referred to as Decorin 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 glycosaminoglycan side chain. Decorin binds to fibrillar collagens, particularly type I collagen, where it regulates collagen fibrillogenesis, fiber spacing, and matrix assembly. Through these interactions, Decorin contributes to tensile strength, extracellular matrix stability, and proper tissue architecture.

In addition to structural functions, Decorin modulates cell signaling pathways by interacting with growth factors and receptor tyrosine kinases, including transforming growth factor beta and epidermal growth factor receptor. These interactions influence cell proliferation, migration, and differentiation, positioning Decorin as both a structural and regulatory matrix component. DCN expression is prominent in skin, tendon, ligament, cornea, prostate stroma, and placental connective tissue. In tissue-based analyses, Decorin typically demonstrates extracellular stromal staining localized between collagen bundles and within connective tissue frameworks.

Altered Decorin expression has been implicated in fibrotic disorders, abnormal wound healing, and tumor progression, where extracellular matrix composition influences cellular behavior and microenvironmental signaling. Reduced or redistributed Decorin may be associated with desmoplastic stroma or altered collagen organization in malignancy. A DCN Antibody Recombinant Mouse MAb such as clone rDCN/9075 supports investigations into extracellular matrix biology, stromal-tumor interactions, fibrosis research, and connective tissue development. This antibody 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

Optimal dilution of the DCN antibody recombinant mouse mAb should be determined by the researcher.

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

Immunogen

A recombinant human Decorin protein fragment (within amino acids 200-359) was used as the immunogen for the DCN antibody recombinant mouse mAb.

Storage

Aliquot the DCN antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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