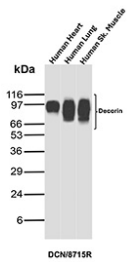
Decorin Antibody Recombinant Rabbit MAb / DCN [clone DCN/8715R] (V4314)

Catalog No.	Formulation	Size
V4314-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4314-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4314SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

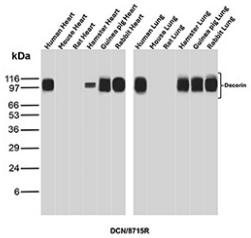
Recombinant RABBIT MONOCLONAL

Bulk quote request

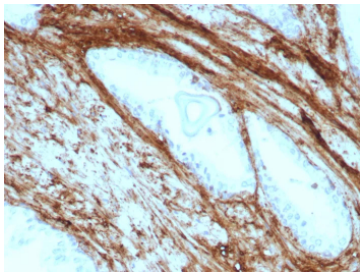
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	DCN/8715R
Purity	Protein A/G affinity
UniProt	P07585
Localization	Secreted
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 minutes at RT Western Blot : 2-4ug/ml
Limitations	This Decorin antibody is available for research use only.



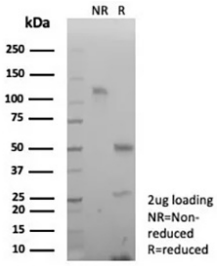
Western blot analysis of Decorin antibody in human tissues. Lysates from human heart, human lung, and human skeletal muscle were probed using recombinant rabbit monoclonal Decorin antibody (clone DCN/8715R). A prominent immunoreactive band is observed at approximately 90-100 kDa, consistent with the glycosylated form of Decorin. The predicted molecular weight of the Decorin core protein is approximately 40 kDa; however, Decorin is a proteoglycan that carries glycosaminoglycan side chains, resulting in a higher apparent molecular weight on SDS-PAGE. The banding pattern across multiple tissue types is consistent with extracellular matrix-associated Decorin expression.



Western blot analysis of Decorin antibody in multi-species heart and lung tissues. Lysates from human heart, mouse heart, rat heart, hamster heart, guinea pig heart, rabbit heart, as well as human lung, mouse lung, rat lung, hamster lung, guinea pig lung, and rabbit lung were probed using recombinant rabbit monoclonal Decorin antibody (clone DCN/8715R). A prominent immunoreactive band is detected at approximately 90-100 kDa across species, consistent with the glycosylated form of Decorin.
The predicted molecular weight of the Decorin core protein is approximately 40 kDa; however, Decorin is a small leucine-rich proteoglycan that carries glycosaminoglycan side chains, resulting in a higher apparent molecular weight on SDS-PAGE. The conserved banding pattern across multiple species supports cross-species recognition of Decorin and is consistent with its extracellular matrix localization in connective tissues.



Immunohistochemistry of Decorin antibody in human prostate carcinoma tissue. Formalin-fixed, paraffin-embedded human prostate carcinoma was stained using recombinant rabbit monoclonal Decorin antibody (clone DCN/8715R). 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 connective tissue surrounding malignant glands, consistent with Decorin localization within collagen-rich matrix compartments.



SDS-PAGE analysis of purified, BSA-free Decorin antibody recombinant rabbit mAb clone DCN/8715R as confirmation of integrity and purity.

Description

Decorin Antibody Recombinant Rabbit MAb detects Decorin, a small leucine-rich extracellular matrix proteoglycan encoded by the DCN gene and widely expressed in connective tissues. Clone DCN/8715R is a recombinant rabbit monoclonal antibody developed for consistent research performance and supports evaluation of stromal architecture and collagen-associated matrix organization in tissue specimens.

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, regulating collagen fibrillogenesis, fiber diameter, and interfibrillar spacing. Through these structural interactions, Decorin contributes to tissue tensile strength and extracellular matrix stability.

Beyond its structural role, 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 matrix scaffold and a regulatory molecule. DCN expression is prominent in skin, tendon, ligament, cornea, placental stroma, and prostatic 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 disease, impaired wound healing, and tumor progression, where extracellular matrix composition shapes microenvironmental signaling. Changes in Decorin distribution may accompany desmoplastic reactions or altered collagen organization in malignancy. A Decorin Antibody Recombinant Rabbit MAb such as clone DCN/8715R supports investigations into extracellular matrix biology, fibrosis research, stromal-

tumor interactions, 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

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

2. 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 212-336) was used as the immunogen for the Decorin antibody.

Storage

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