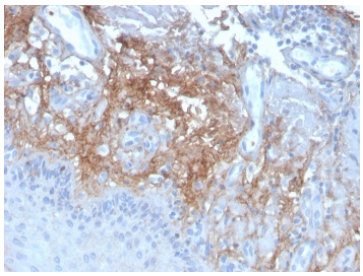
Decorin Antibody [clone DCN/3523] (V7713)

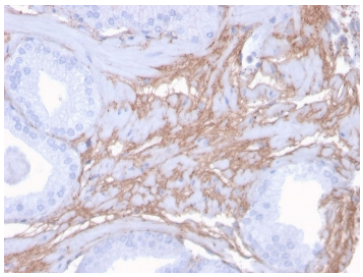
Catalog No.	Formulation	Size
V7713-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7713-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7713SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

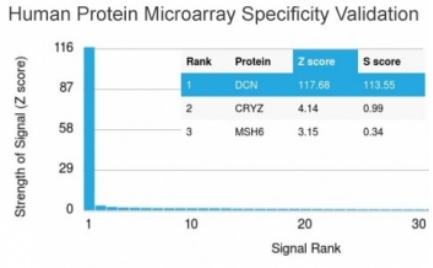
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	DCN/3523
Purity	Protein G affinity chromatography
UniProt	P07585
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This Decorin antibody is available for research use only.



IHC staining of FFPE human skin with Decorin antibody (clone DCN/3523). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min and allow to cool before testing.



IHC staining of FFPE human prostate with Decorin antibody (clone DCN/3523). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min and allow to cool before testing.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using Decorin antibody (clone DCN/3523). These results demonstrate the foremost specificity of the DCN/3523 mAb.
Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.

Description

Decorin antibody detects decorin, a small leucine-rich proteoglycan encoded by the DCN gene. Decorin is a secreted component of the extracellular matrix, where it binds collagen and regulates tissue structure, growth factor signaling, and fibrotic remodeling. Because decorin influences both normal connective tissue organization and disease processes such as cancer and fibrosis, Decorin antibody is widely used in cell biology, oncology, and tissue pathology research.

Decorin consists of a core protein containing leucine-rich repeats with a single glycosaminoglycan chain attached. Its interaction with type I collagen controls fibril diameter and spacing, ensuring mechanical stability of skin, tendon, and cornea. Beyond structural support, decorin modulates signaling molecules including transforming growth factor beta, epidermal growth factor receptor ligands, and insulin-like growth factors. These interactions position decorin as both a structural organizer and a signaling regulator within the extracellular environment.

The Decorin antibody clone DCN/3523 provides reliable and specific recognition of decorin. Clone DCN/3523 has been employed in peer-reviewed studies investigating extracellular matrix biology, fibrotic progression, and tumor microenvironment remodeling. Its consistent performance makes it suitable for immunohistochemistry, immunoblotting, and biochemical assays requiring detection of decorin in tissues and cell culture systems.

Research using clone DCN/3523 has shown how decorin antagonizes pro-fibrotic pathways by sequestering TGF-beta, reducing excessive matrix deposition. In oncology, decorin has been identified as a tumor suppressor, limiting tumor progression by interfering with receptor tyrosine kinase activity. Its absence or reduced expression correlates with aggressive disease in multiple cancers. Beyond pathology, decorin is essential in ocular biology, where it contributes to corneal transparency, and in musculoskeletal tissues, where it supports tendon resilience.

NSJ Bioreagents supplies this Decorin antibody to support connective tissue research, fibrosis models, and tumor biology. Alternate terms include DCN antibody, small leucine-rich proteoglycan antibody, dermatan sulfate proteoglycan antibody, extracellular matrix regulator antibody, and collagen fibrillogenesis regulator antibody.

Application Notes

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

Immunogen

A human recombinant partial protein (amino acids 212-336) was used as the immunogen for the Decorin antibody.

Storage

Store the Decorin antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).