

Decorin (N-15): sc-22613

BACKGROUND

Decorin is a small leucine-rich proteoglycan (SLRP) family member that consists of a glycosaminoglycan chain-containing core protein. The core protein contains ten leucine rich repeats that contain sites for glycosylation, flanked by disulfide bond stabilizing loops. Decorin binds to Collagen Type I, II and IV *in vivo* and promotes the formation of fibers with variations in stability and solubility. The Decorin core protein binds to growth factors, intercellular matrix molecules, such as Fibronectin and Thrombospondin, and to the Decorin endocytosis receptor. Decorin binds to and inhibits TGF β and is a direct or indirect negative modulator of TGF β synthesis. Inhibition of Decorin core protein gene expression by the combination of IFN- γ and TNF α may contribute to cartilage destruction that is characteristic of inflammatory joint diseases. The human Decorin gene maps to chromosome 12q21.33 and encodes a 359 amino acid protein.

CHROMOSOMAL LOCATION

Genetic locus: DCN (human) mapping to 12q21.33; Dcn (mouse) mapping to 10 C3.

SOURCE

Decorin (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Decorin of human origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-22613 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

Decorin (N-15) is recommended for detection of Decorin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Decorin (N-15) is also recommended for detection of Decorin in additional species, including equine, canine, bovine and porcine.

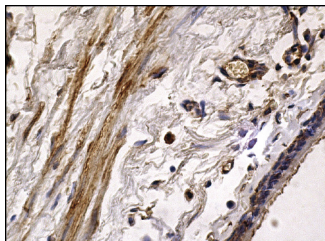
Suitable for use as control antibody for Decorin siRNA (h): sc-40993, Decorin siRNA (m): sc-40994, Decorin shRNA Plasmid (h): sc-40993-SH, Decorin shRNA Plasmid (m): sc-40994-SH, Decorin shRNA (h) Lentiviral Particles: sc-40993-V and Decorin shRNA (m) Lentiviral Particles: sc-40994-V.

Molecular Weight of Decorin: 43 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



Decorin (N-15): sc-22613. Immunoperoxidase staining of formalin fixed, paraffin-embedded human bronchus tissue showing positive staining of extracellular matrix.

SELECT PRODUCT CITATIONS

1. Watts, E.J., et al. 2011. Extracellular matrix expression by equine oral and limb fibroblasts in *in vitro* culture. Res. Vet. Sci. 92: 213-218.
2. Bianchetti, L., et al. 2012. Extracellular matrix remodelling properties of human fibrocytes. J. Cell. Mol. Med. 16: 483-495.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **Decorin (9XX): sc-73896**, our highly recommended monoclonal alternative to Decorin (N-15).