

Decorin (H-80): sc-22753

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 (H-80) is a rabbit polyclonal antibody raised against amino acids 136-215 of Decorin of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Decorin (H-80) 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), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (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 (H-80) is also recommended for detection of Decorin in additional species, including equine, canine, bovine, porcine and avian.

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.

Positive Controls: Decorin (h): 293 Lysate: sc-159946.

RESEARCH USE

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

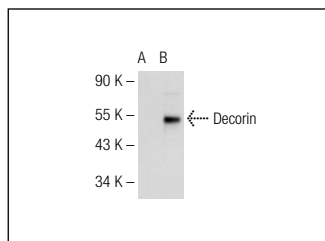
PROTOCOLS

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

STORAGE

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

DATA



Decorin (H-80): sc-22753. Western blot analysis of Decorin expression in non-transfected: sc-110760 (A) and human Decorin transfected: sc-159946 (B) 293 whole cell lysates.

SELECT PRODUCT CITATIONS

1. Kato, H., et al. 2005. Differential diagnosis between complete and partial mole by TSSC3 antibody completely correlates to DNA diagnosis. *Diagn. Mol. Pathol.* 14: 164-169.
2. Fernández-Medarde, A., et al. 2007. Laser microdissection and microarray analysis of the hippocampus of Ras-GRF1 knockout mice reveals gene expression changes affecting signal transduction pathways related to memory and learning. *Neuroscience* 146: 272-285.
3. Bhattacharyya, S., et al. 2008. Distinct effects of N-acetylgalactosamine-4-sulfatase and galactose-6-sulfatase expression on chondroitin sulfates. *J. Biol. Chem.* 283: 9523-9530.
4. Kishioka, Y., et al. 2008. Decorin enhances the proliferation and differentiation of myogenic cells through suppressing myostatin activity. *J. Cell. Physiol.* 115: 856-867.
5. Sivasubramanian, S., et al. 2008. Mechanism of enzymatic dehairing of skins using a bacterial alkaline protease. *Chemosphere* 70: 1025-1034.
6. Zheng, J., et al. 2009. Microarray identifies extensive downregulation of noncollagen extracellular matrix and profibrotic growth factor genes in chronic isolated mitral regurgitation in the dog. *Circulation* 119: 2086-2095.
7. Calabrese, G.C., et al. 2011. Decorin and biglycan expression: its relation with endothelial heterogeneity. *Histol. Histopathol.* 26: 481-490.

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Try **Decorin (9XX): sc-73896**, our highly recommended monoclonal alternative to Decorin (H-80).