



## Polyclonal Anti- Decorin (Sephacrose Bead Conjugate)

**Catalogue No.** PA1314-S

**Lot No.** 08C01

**Ig type:** rabbit IgG

**Size:** 100µg/vial

**Specificity**

Human, rat, mouse. No cross reactivity with other proteins.

**Recommended application**

(Immunoprecipitation(IP))

**Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminal of human Decorin, identical to the related rat and mouse sequence.

**Purification**

Immunogen affinity purified.

**Formulation**

50% slurry in PBS pH 7.2 with 0.01mg NaN<sub>3</sub> preservative.

**Storage**

Store at 4°C for frequent use.

**Description:**

This Antagene antibody is immobilized via covalent binding of primary amino groups to N-hydroxysuccinimide (NHS)-activated sepharose beads. It is useful for immunoprecipitation assays

## BACKGROUND

Decorin is a proteoglycan on average 90 - 140 kilodaltons (kD) in size. The human decorin gene spans more than 38 kb and contains 8 exons and very large introns, 2 of which are 5.4 and more than 13.2 kb.<sup>1</sup> And the human decorin gene is mapped to 12q21.3.2 It belongs to the small leucine-rich proteoglycan (SLRP) family and consists of a protein core containing leucine repeats with a glycosaminoglycan (GAG) chain consisting of either chondroitin sulfate (CS) or dermatan sulfate (DS). Decorin is a small cellular or pericellular matrix proteoglycan and is closely related in structure to biglycan protein. Decorin and biglycan are thought to be the result of a gene duplication. This protein is a component of connective tissue, binds to type I collagen fibrils, and plays a role in matrix assembly. And it also may play a role in epithelial/mesenchymal interactions during organ development and shaping.<sup>3</sup> Decorin has been shown to have anti-tumorigenic properties in an experimental murine tumor model and is capable of suppressing the growth of various tumor cell lines. There are multiple alternatively spliced transcript variants known for the decorin gene. Mutations in the decorin gene are associated with congenital stromal corneal dystrophy.

## REFERENCE

1. Danielson, K. G.; Fazzio, A.; Cohen, I.; Cannizzaro, L. A.; Eichstetter, I.; Iozzo, R. V. : The human decorin gene: intron-exon organization, discovery of two alternatively spliced exons in the 5-prime untranslated region, and mapping of the gene to chromosome 12q23. *Genomics* 15: 146-160, 1993.
2. Vetter, U.; Vogel, W.; Just, W.; Young, M. F.; Fisher, L. W. : Human decorin gene: intron-exon junctions and chromosomal localization. *Genomics* 15: 161-168, 1993.
3. Scholzen, T.; Solursh, M.; Suzuki, S.; Reiter, R.; Morgan, J. L.; Buchberg, A. M.; Siracusa, L. D.; Iozzo, R. V. : The murine decorin: complete cDNA cloning, genomic organization, chromosomal assignment, and expression during organogenesis and tissue differentiation. *J. Biol. Chem.* 269: 28270-28281, 1994.

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