



Recombinant Protein Technical Manual  
Recombinant Human Decorin Protein (Human Cells,  
His Tag)  
RPES3154

### Product Data:

**Product SKU:** RPES3154

**Size:** 10µg

**Species:** Human

**Expression host:** Human Cells

**Uniprot:** P07585

### Protein Information:

**Molecular Mass:** 38.8 kDa

**AP Molecular Mass:** 43-50 kDa

**Tag:** C-6His

**Bio-activity:**

**Purity:** > 95% as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from a 0.2 µm filtered solution of PBS, pH7.4.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Decorin; Bone proteoglycan II; PG-S2; PG40; DCN; SLRR1B

## Immunogen Information:

**Sequence:** Gly17-Lys359

## Background:

Decorin is a secreted chondroitin/dermatan sulfate proteoglycan in the family of small leucine-rich proteoglycans (SLRPs). SLRP family members are characterized by N-terminal and C-terminal cysteine-rich regions which flank the central region containing 102 tandem leucine-rich repeats (LRR). The human Decorin cDNA encodes a 359 amino acid (aa) precursor that includes a 16 aa signal sequence and a 14 aa propeptide. Alternate splicing of human Decorin generates five isoforms with variable length deletions. Decorin is an N-glycosylated protein that also carries a variably sized hybrid chondroitin/dermatan sulfate chain at Ser34. Decorin regulates assembly of the extracellular collagen matrix and the bioactivity of the matrix associated growth factors FGF2, GDF8/Myostatin, TGF $\beta$ , and WISP1. It also binds and activates EGF R, ErbB4, and IGF1-R. In vivo, Decorin promotes myoblast differentiation, supports angiogenesis, and inhibits tumor progression.