



Recombinant Protein Technical Manual
Recombinant Human Decorin Protein (Baculovirus,
His Tag)
RPES3173

Product Data:

Product SKU: RPES3173

Size: 10µg

Species: Human

Expression host: Baculovirus

Uniprot: P07585

Protein Information:

Molecular Mass: 38.8 kDa

AP Molecular Mass: 40-45 kDa

Tag: C-His

Bio-activity:

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

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

Storage: Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°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 β , and WISP1. It also binds and activates EGF R, ErbB4, and IGFI-R. In vivo, Decorin promotes myoblast differentiation, supports angiogenesis, and inhibits tumor progression.