# Recombinant Human Decorin Protein (Baculovirus, His Tag)

### Catalog No. PKSH033701

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description		
Synonyms	Decorin;Bone proteoglycan II;PG-S2;PG40;DCN;SLRR1B	
Species	Human	
Expression Host	Baculovirus-Insect Cells	
Sequence	Gly17-Lys359	
Accession	P07585	
Calculated Molecular Weight	38.8 kDa	
Observed molecular weight	40-45 kDa	
Tag	C-His	
Bioactivity	Not validated for activity	
Properties		
Purity	> 95 % as determined by reducing SDS-PAGE.	
Endotoxin	< 1.0 EU per $\mu$ g of the protein as determined by the LAL method.	
Storage	Generally, 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, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.	
Reconstitution	Please refer to the printed manual for detailed information.	

Data

kDa	МК	R
120 90 60	-	
40		-
30	-	
20	-	
14		

> 95 % as determined by reducing SDS-PAGE.

## 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

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central region containing 10-12 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 variablysized 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 IGFI-R. In vivo; Decorin promotes myoblast differentiation; supports angiogenesis; and inhibits tumor progression.

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