

RP01344

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Recombinant Human Decorin/PG-S2/DCN Protein

Catalog No.: RP01344

Recombinant

Sequence Information

Species	Gene ID	Swiss Prot
Human	1634	P07585-1

Tags

C-His

Synonyms

DCN;CSCD;DSPG2;PG40;PGII;PGS2;SLRR
1B;decorin;Decorin

Product Information

Source	Purification
HEK293 cells	> 95% by SDS-PAGE.

Endotoxin

Please contact us for more information.

Formulation

Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Background

Decorin is a ubiquitous small cellular or pericellular matrix proteoglycan and is closely related in structure to biglycan protein. It belongs to the small leucine-rich proteoglycan (SLRP) family and consists of a core protein and a covalently linked glycosaminoglycan chain which is either chondroitin sulfate (CS) or dermatan sulfate (DS). As a component of connective tissue, decorin interacts with several extracellular matrix components, such as type I collagen and fibronectin, and plays a role in matrix assembly. Decorin resides in the tumor microenvironment and affects the biology of various types of cancer by downregulating the activity of several receptors involved in cell growth and survival. Decorin binds to and modulates the signaling of the epidermal growth factor receptor and other members of the ErbB family of receptor tyrosine kinases. It exerts its antitumor activity by a dual mechanism: via inhibition of these key receptors through their physical downregulation coupled with attenuation of their signaling, and by binding to and sequestering TGFbeta. Decorin also modulates the insulin-like growth factor receptor and the low-density lipoprotein receptor-related protein 1, which indirectly affects the TGFbeta receptor pathway. Decorin plays significant roles in tissue development and assembly, as well as playing both direct and indirect signaling roles.

Basic Information

Description

Recombinant Human Decorin/PG-S2/DCN Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Gly17-Lys359) of human Decorin/DCN/CSCD (Accession #NP_598010.1) fused with 6xHis tag at the C-terminus.

Bio-Activity

Measured by its binding ability in a functional ELISA. Immobilized Human DCN at 1 µg/mL (100 µL/well) can bind DCN Rabbit pAb with a linear range of 0.5-141 ng/mL.

Storage

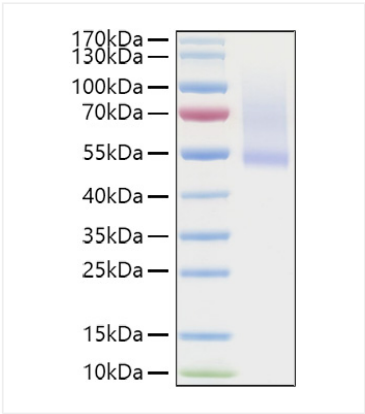
Store the lyophilized protein at -20°C to -80°C for long term. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week. Avoid repeated freeze/thaw cycles.

Contact

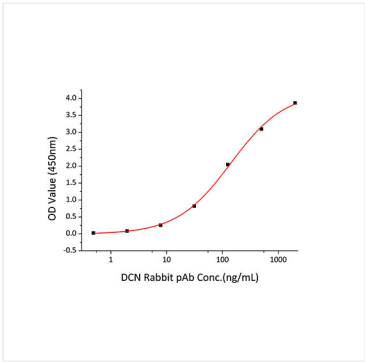


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Validation Data



Recombinant Human Decorin/PG-S2/DCN Protein was determined by SDS-PAGE with Coomassie Blue, showing bands at 45 kDa.



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