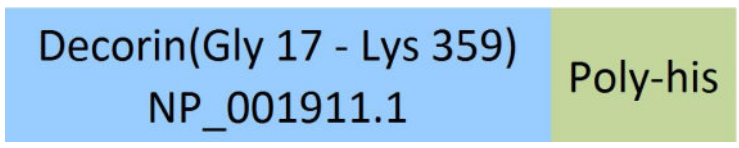
Synonym

Decorin,DCN,CSCD,DSPG2,PG40,PGII,PGS2,SLRR1B

Source

Human Decorin, His Tag (DE1-H5223) is expressed from human 293 cells (HEK293). It contains AA Gly 17 - Lys 359 (Accession # NP_001911.1). Predicted N-terminus: Gly 17

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 38.8 kDa. The protein migrates as 46-55 kDa under reducing (R) condition (SDS-PAGE) due to different glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

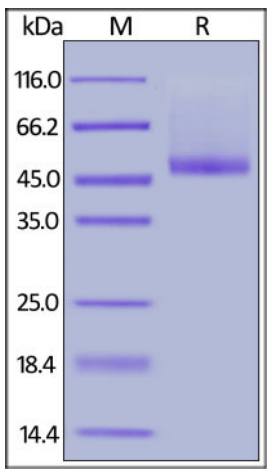
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human Decorin, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

Background

Decorin is also known as bone proteoglycan II, PGS2, SLRR1B, DCN, DSPG2 and PG40, is a secreted chondroitin /dermatan sulfate proteoglycan in the family of small leucine-rich proteoglycans (SLRPs). 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. Decorin appears to influence fibrillogenesis, and also interacts with fibronectin, thrombospondin, the complement component C1q, epidermal growth factor receptor (EGFR) and transforming growth factor-beta (TGF-beta). Defects in DCN are the cause of congenital stromal corneal dystrophy (CSCD).

References

(1) Santra, Manoranjan, et al., 2002, J. Biol. Chem. (United States) 277 (38): 35671–81.

(2) Iozzo, R V., et al., 1999, J. Biol. Chem. (UNITED STATES) 274 (8): 4489–92.

(3) Schönherr, E., et al., 1998, Arch. Biochem. Biophys. (UNITED STATES) 355 (2): 241–8.

(4) Takeuchi, Y., et al., 1994, J. Biol. Chem. (UNITED STATES) 269 (51): 32634–8.

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.