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## Recombinant human HSPG2 protein, N-His

Catalog Number: bs-42231P

Concentration: >0.5mg/ml

Species: Human

AA Seq: 4180-4391/4391

Predicted MW: 24.5 kDa

Tags: N-His

Endotoxin: Not analyzed

Purity: >90% as determined by SDS-PAGE

Purification: AC

Form: Liquid

Storage: 20mM Tris-HCl (pH8.0).

Stored at -70°C or -20°C. Avoid repeated freeze/thaw cycles.

**Background:** This gene encodes the perlecan protein, which consists of a core protein to which three long chains of glycosaminoglycans (heparan sulfate or chondroitin sulfate) are attached. The perlecan protein is a large multidomain proteoglycan that binds to and cross-links many extracellular matrix components and cell-surface molecules. It has been shown that this protein interacts with laminin, prolargin, collagen type IV, FGFBP1, FBLN2, FGF7 and Transthyretin, etc. and plays essential roles in multiple biological activities. Perlecan is a key component of the vascular extracellular matrix, where it helps to maintain the endothelial barrier function. It is a potent inhibitor of smooth muscle cell proliferation and is thus thought to help maintain vascular homeostasis. It can also promote growth factor (e.g., FGF2) activity and thus stimulate endothelial growth and re-generation. It is a major component of basement membranes, where it is involved in the stabilization of other molecules as well as being involved with glomerular permeability to macromolecules and cell adhesion. Mutations in this gene cause Schwartz-Jampel syndrome type 1, Silverman-Handmaker type of dyssegmental dysplasia, and Tardive dyskinesia.[provided by RefSeq, Mar 2010].

### VALIDATION IMAGES

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The purity of the protein is greater than 90% as determined by reducing SDS-PAGE.