



Anti-HSPG2 (aa 25-134) polyclonal antibody (DPAB-DC1627)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description

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 it 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. Alternative splicing of this gene results in multiple transcript variants.

Immunogen

HSPG2 (NP_005520.3, 25 a.a. ~ 134 a.a) partial recombinant protein with GST tag. The sequence is
GLRAYDGLSLPEDIETVTASQMRWTHSYLSDDMLADSLSGDDLGSGLGSGDFQMVF
RALVNFTRSIEYSPQLEDAGSREFREVSEAVVDTLESEYLKIPGDQVVSV

Source/Host

Mouse

Species Reactivity

Human

Conjugate

Unconjugated

Applications

WB (Recombinant protein), ELISA,

Size

50 µl

Buffer	50 % glycerol
Preservative	None
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

GENE INFORMATION

Gene Name	HSPG2 heparan sulfate proteoglycan 2 [Homo sapiens (human)]
Official Symbol	HSPG2
Synonyms	HSPG2; heparan sulfate proteoglycan 2; PLC; SJA; SJS; HSPG; SJS1; PRCAN; basement membrane-specific heparan sulfate proteoglycan core protein; perlecan proteoglycan; endorepellin (domain V region);
Entrez Gene ID	3339
Protein Refseq	NP_001278789
UniProt ID	P98160
Chromosome Location	1p36.1-p34
Pathway	A tetrasaccharide linker sequence is required for GAG synthesis; Chondroitin sulfate/dermatan sulfate metabolism; Degradation of the extracellular matrix; Diseases associated with visual transduction
Function	metal ion binding; protein C-terminus binding; protein binding;