

## Product datasheet for **RC223950L1V**

### Heparan Sulfate Proteoglycan 2 (HSPG2) (NM\_005529) Human Tagged ORF Clone Lentiviral Particle

#### Product data:

Product Type:	Lentiviral Particles
Product Name:	Heparan Sulfate Proteoglycan 2 (HSPG2) (NM_005529) Human Tagged ORF Clone Lentiviral Particle
Symbol:	Heparan Sulfate Proteoglycan 2
Synonyms:	HSPG; PLC; PRCAN; SJA; SJS; SJS1
Mammalian Cell Selection:	None
Vector:	pLenti-C-Myc-DDK (PS100064)
Tag:	Myc-DDK
ACCN:	NM_005529
ORF Size:	13176 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC223950).
OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <a href="#">More info</a></p>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	<a href="#">NM_005529.3</a>



[View online »](#)

RefSeq Size:	14294 bp
RefSeq ORF:	13176 bp
Locus ID:	3339
UniProt ID:	<a href="#">P98160</a>
Cytogenetics:	1p36.12
Domains:	LamB, SEA, LamG, EGF_Lam, ldl_recept_a, ig, IGv, IGc2, IG, EGF, EGF
Protein Families:	Druggable Genome
Protein Pathways:	ECM-receptor interaction
MW:	468.91 kDa
Gene Summary:	<p>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. [provided by RefSeq, May 2014]</p>