

Product datasheet

Recombinant Human Heparan Sulfate Proteoglycan 2 protein  
ab114285

1 图像

概述

产品名称	重组人Heparan Sulfate Proteoglycan 2蛋白
蛋白长度	Protein fragment

描述

性质	Recombinant
来源	Wheat germ
氨基酸序列	
Accession	<a href="#">P98160</a>
种属	Human
序列	GLRAYDGLSLPEDIETVTASQMRWTHSYLSDDEDMLADSI SGDDL GSGDL GSGDFQMVYFRALVNFTRSIEYSPQLEDAGSREFREVSEAVVDTLESEYL KIPGDQVVS
分子量	38 kDa including tags
氨基酸	25 to 134

技术指标

Our [Abpromise guarantee](#) covers the use of **ab114285** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应用	ELISA SDS-PAGE Western blot
形式	Liquid
补充说明	Protein concentration is above or equal to 0.05 µg/µl. Best use within three months from the date of receipt of this protein.

制备和贮存

## 稳定性和存储

Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

pH: 8.00

Constituents: 0.3% Glutathione, 0.79% Tris HCl

## 常规信息

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### 功能

Integral component of basement membranes. Component of the glomerular basement membrane (GBM), responsible for the fixed negative electrostatic membrane charge, and which provides a barrier which is both size- and charge-selective. It serves as an attachment substrate for cells. Plays essential roles in vascularization. Critical for normal heart development and for regulating the vascular response to injury. Also required for avascular cartilage development. Endorepellin is an anti-angiogenic and anti-tumor peptide that inhibits endothelial cell migration, collagen-induced endothelial tube morphogenesis and blood vessel growth in the chorioallantoic membrane. Blocks endothelial cell adhesion to fibronectin and type I collagen. Anti-tumor agent in neovascularization. Interaction with its ligand, integrin alpha2/beta1, is required for the anti-angiogenic properties. Evokes a reduction in phosphorylation of receptor tyrosine kinases via alpha2/beta1 integrin-mediated activation of the tyrosine phosphatase, PTPN6. The LG3 peptide has anti-angiogenic properties that require binding of calcium ions for full activity.

### 组织特异性

Found in the basement membranes.

### 疾病相关

Defects in HSPG2 are the cause of Schwartz-Jampel syndrome (SJS1) [MIM:255800]; a rare autosomal recessive disorder characterized by permanent myotonia (prolonged failure of muscle relaxation) and skeletal dysplasia, resulting in reduced stature, kyphoscoliosis, bowing of the diaphyses and irregular epiphyses.

Defects in HSPG2 are the cause of dyssegmental dysplasia Silverman-Handmaker type (DDSH) [MIM:224410]. The dyssegmental dysplasias are rare, autosomal recessive skeletal dysplasias with anisodromy and micromelia. There are two recognized types: the severe, lethal DDSH and the milder Rolland-Desbuquois form. Individuals with DDSH also have a flat face, micrognathia, cleft palate and reduced joint mobility, and frequently have an encephalocoele. The endochondral growth plate is short, the calcospherites (which are spherical calcium-phosphorus crystals produced by hypertrophic chondrocytes) are unfused, and there is mucoid degeneration of the resting cartilage.

### 序列相似性

Contains 4 EGF-like domains.

Contains 22 Ig-like C2-type (immunoglobulin-like) domains.

Contains 11 laminin EGF-like domains.

Contains 3 laminin G-like domains.

Contains 3 laminin IV type A domains.

Contains 4 LDL-receptor class A domains.

Contains 1 SEA domain.

### 翻译后修饰

Proteolytic processing produces the C-terminal angiogenic peptide, endorepellin. This peptide can be further processed to produce the LG3 peptide.

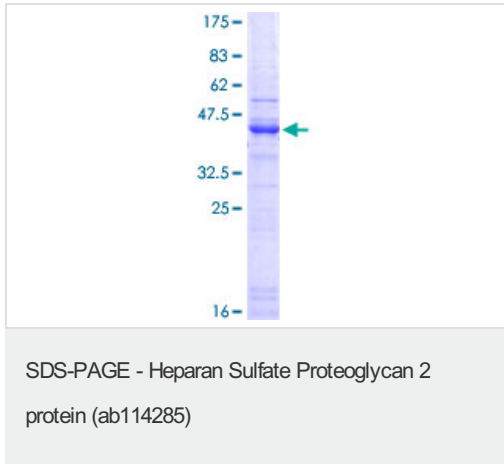
N- and O-glycosylated; contains three heparan sulfate chains. The LG3 peptide contains at least three and up to five potential O-glycosylation sites but no N-glycosylation.

### 细胞定位

Secreted > extracellular space > extracellular matrix > basement membrane.

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## 图片



12.5% SDS-PAGE showing ab114285 at approximately 37.73kDa stained with Coomassie Blue.

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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