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Product datasheet

Anti-Heparan Sulfate Proteoglycan 2/Perlecan antibody [A7L6] ab2501

★★★★★ 10 Abreviews 28 References 2 图像

概述

产品名称 Anti-Heparan Sulfate Proteoglycan 2/Perlecan抗体[A7L6]

描述 大鼠单克隆抗体[A7L6] to Heparan Sulfate Proteoglycan 2/Perlecan

宿主 Rat

特异性 Recognizes domain IV of heparan sulphate proteoglycan 2 / perlecan. The reactivity is

independent of the galactosaminoglycan moieties. Therefore, the epitope is not sensitive to

heparitinase treatment.

经测试应用 适用于: ICC, IHC-P, IP, IHC-Fr, WB

种属反应性 与反应: Mouse, Rat, Cow, Human, Pig, Fish

免疫原 Tissue, cells or virus corresponding to Heparan Sulfate Proteoglycan 2/Perlecan. High molecular

mass material derived from the Engelbreth-Holm-Swarm (EHS) tumor matrix containing laminin,

entactin and HSPG.

Database link: **P98160**

常规说明 Proteoglycans are macromolecules consisting of a variety of core proteins with covalently

attached one or several polysaccharide chains of the glycosaminoglycan type (heparan sulphate, heparin, chondroitin sulphate, dermatan sulphate or keratan sulphate). At least two forms of basement membrane heparan sulphate proteoglycan (HSPG) have been identified. One with a large core protein (> 400 kD) and one with a small core protein (30 kD). The large HSPG is probably the most abundant basement membrane proteoglycan. It is located predominantly in the lamina lucida, where it forms clustered aggregates and interacts with other basement membrane components to form the matrix. In addition, it also plays a critical role in attachment of cells to the

basal membrane via integrin receptors.

Source: A7L6 is a Rat monoclonal IgG2a antibody derived by fusion of X63 Ag8.653 Mouse myeloma cells with spleen cells from a Fisher Rat immunized with high molecular mass material derived from the Engelbreth-Holm-Swarm (EHS) tumor matrix containing laminin, entactin and

HSPG.

Formulation: The vial contains 100 ul 1 mg/ml monoclonal purified antibody in PBS containing

0.09% sodium azide.

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

存储溶液 Preservative: 0.09% Sodium azide

Constituents: PBS, 0.1% BSA

纯**度** Protein A purified

Primary antibody说明 Proteoglycans are macromolecules consisting of a variety of core proteins with covalently

attached one or several polysaccharide chains of the glycosaminoglycan type (heparan sulphate, heparin, chondroitin sulphate, dermatan sulphate or keratan sulphate). At least two forms of basement membrane heparan sulphate proteoglycan (HSPG) have been identified. One with a large core protein (> 400 kD) and one with a small core protein (30 kD). The large HSPG is probably the most abundant basement membrane proteoglycan. It is located predominantly in the lamina lucida, where it forms clustered aggregates and interacts with other basement membrane components to form the matrix. In addition, it also plays a critical role in attachment of cells to the

basal membrane via integrin receptors.

骨髓瘤 x63-Ag8.653

同种型 lgG2a

应用

The Abpromise guarantee Abpromise™承诺保证使用ab2501于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
ICC		Use at an assay dependent concentration. Use amplification with ABC (avidin biotin complex).
IHC-P	★★★★★ (6)	Use at an assay dependent concentration. Use amplification with ABC (avidin biotin complex).
IP		Use at an assay dependent concentration.
IHC-Fr		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration.

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 in 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

疾病相关

Found in the basement membranes.

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 anisospondyly 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 lq-like C2-type (immunoglobulin-like) domains.

Contains 11 Iaminin EGF-like domains.
Contains 3 Iaminin 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

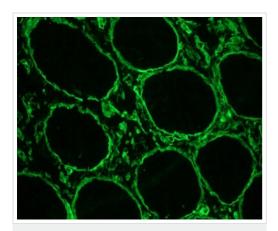
Proteolytic processing produces the C-terminal angiogenic peptide, endorepellin. This peptide can be further processed to produce the LG3 peptide.

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

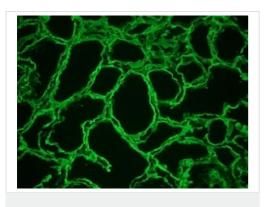
Secreted > extracellular space > extracellular matrix > basement membrane.

图片



Immunohistochemistry (Frozen sections) - Anti-Heparan Sulfate Proteoglycan 2/Perlecan antibody [A7L6] (ab2501)

IHC image on a frozen section of human colon showing strong reactivity in the extracellular matrix and basement membrane.



Immunohistochemistry (Frozen sections) - Anti-Heparan Sulfate Proteoglycan 2/Perlecan antibody [A7L6] (ab2501)

Immunohistochemistry on frozen section of Human kidney showing strong reactivity in the extracellular matrix and basement membrane.

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