abcam

Product datasheet

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

★★★★★ 10 Abreviews 28 References 画像数 2

製品の概要

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

製品の詳細 Rat monoclonal [A7L6] to Heparan Sulfate Proteoglycan 2/Perlecan

由来種 Rat

特異性 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.

アプリケーション 適用あり: ICC, IHC-P, IP, IHC-Fr, WB

種交差性 交差種: 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**

特記事項 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

製品の特性

製品の状態 Liquid

保存方法 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.

パッファー Preservative: 0.09% Sodium azide

Constituents: PBS, 0.1% BSA

精製度 Protein A purified

一次抗体 備考 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.

ポリ/モノ モノクローナル

クローン名 A7L6

₹I□-**₹** x63-Ag8.653

アイソタイプ lgG2a

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab2501の使用に適用されますアプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
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.

機能

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.

組織特異性

関連疾患

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.

配列類似性

Contains 4 EGF-like domains.

Contains 22 lq-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.

翻訳後修飾

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

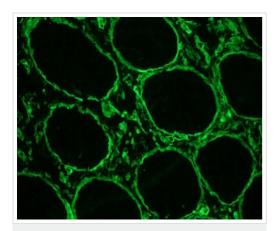
N- and O-glycosylated; contains three heparan sulfate chains. The LG3 peptide contains at least

three and up to five potential O-glycosylation sites but no N-glycosylation.

細胞内局在

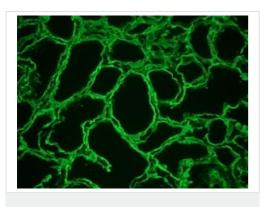
Secreted > extracellular space > extracellular matrix > basement membrane.

画像



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.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- · Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.co.jp/abpromise or contact our technical team.

Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors