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Anti-HSPG2 Picoband Antibody

Catalog # ABO11968

Product Information

Application	WB, IHC-P
Primary Accession	P98160
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Basement membrane-specific heparan sulfate proteoglycan core protein(HSPG2) detection. Tested with WB, IHC-P in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	3339
Other Names	Basement membrane-specific heparan sulfate proteoglycan core protein, HSPG, Perlecan, PLC, Endorepellin, LG3 peptide, HSPG2
Calculated MW	468830
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, By Heat Western blot, 0.1-0.5 □g/ml, Human
Subcellular Localization	Secreted, extracellular space, extracellular matrix, basement membrane.
Tissue Specificity	Found in the basement membranes.
Source	Eukaryota
Protein Name	Basement membrane-specific heparan sulfate proteoglycan core protein
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	E.coli-derived human HSPG2 recombinant protein (Position: F524-K701). Human HSPG2 shares 86% amino acid (aa) sequence identity with mouse HSPG2.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins

Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.
Sequence Similarities	Contains 4 EGF-like domains.

Protein Information

Name	HSPG2
Function	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 (PubMed:12435733, PubMed:15591058, PubMed:19789387). In muscle, it is essential for localizing acetylcholinesterase (AChE) at the neuromuscular junctions (NMJ), most probably acting as an adapter that links the acetylcholinesterase collagenic tail peptide (COLQ) to alpha- dystroglycan, and is therefore involved in the down-regulation of colinergic synaptic transmission (By similarity). [LG3 peptide]: Has anti-angiogenic properties that require binding of calcium ions for full activity.
Cellular Location	Secreted, extracellular space, extracellular matrix, basement membrane. Secreted
Tissue Location	Detected in cerebrospinal fluid, fibroblasts and urine (at protein level).

Background

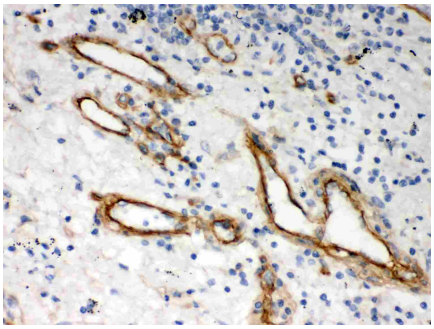
Perlecan (PLC) also known as HSPG2, is a protein that in humans is encoded by the HSPG2 gene. It is mapped to 1p36.12. Perlecan is highly conserved across species and the available data indicate that it has evolved from ancient ancestors by gene duplication and exonshuffling. Perlecan is a key component of the vascular extracellular matrix, here it interacts with a variety of other matrix components and 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. Perlecan can also promote growth factor (e.g., FGF2) activity and thus stimulate endothelial growth and re-generation.

Images



Anti-HSPG2 Picoband antibody, ABO11968, Western blottingAll lanes: Anti HSPG2 (ABO11968) at 0.5ug/mlWB: Recombinant Human HSPG2 Protein 0.5ngPredicted bind size: 69KDObserved bind size: 69KD

Anti-HSPG2 Picoband antibody, ABO11968,IHC(P)IHC(P):



Human Lung Cancer Tissue

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