

# **Anti-HSPG2 Picoband Antibody**

**Catalog # ABO11968** 

# **Specification**

# **Anti-HSPG2 Picoband Antibody - Product Information**

Application WB, IHC
Primary Accession P98160
Host 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.

# **Anti-HSPG2 Picoband Antibody - 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 MW KDa

### **Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1  $\mu$ g/ml, Human, By Heat<br/>blot, 0.1-0.5  $\mu$ g/ml, Human<br/>br>

### **Subcellular Localization**

Secreted, extracellular space, extracellular matrix, basement membrane.

### **Tissue Specificity**

Found in the basement membranes.

#### **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.

# **Anti-HSPG2 Picoband Antibody - 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. [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).

# **Anti-HSPG2 Picoband Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

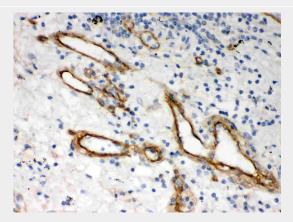
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# Anti-HSPG2 Picoband Antibody - Images



100KD — 70KD — — 55KD — 35KD — 25KD —

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

### Anti-HSPG2 Picoband Antibody - 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.