

### Heparan Sulfate Proteoglycan (Large) / Perlecan Antibody - With BSA and Azide

Rat Monoclonal Antibody [Clone SPM255] **Catalog # AH11474** 

#### **Specification**

#### Heparan Sulfate Proteoglycan (Large) / Perlecan Antibody - With BSA and Azide -**Product Information**

**Application** IHC-P P98<u>160</u> **Primary Accession** 

Other Accession 3339, <u>562227</u>

Reactivity Human, Mouse, Monkey, Pig, Fish, Bovine Host

Clonality Monoclonal

Isotype Rat / IgG2a, kappa Calculated MW >400kDa KDa

#### Heparan Sulfate Proteoglycan (Large) / Perlecan Antibody - With BSA and Azide -**Additional Information**

**Gene ID 3339** 

#### **Other Names**

Basement membrane-specific heparan sulfate proteoglycan core protein, HSPG, Perlecan, PLC, Endorepellin, LG3 peptide, HSPG2

Store at 2 to 8°C. Antibody is stable for 24 months.

#### **Precautions**

Heparan Sulfate Proteoglycan (Large) / Perlecan Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

#### Heparan Sulfate Proteoglycan (Large) / Perlecan Antibody - With BSA and Azide -**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**

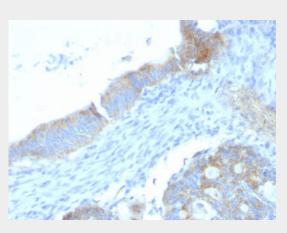
Detected in cerebrospinal fluid, fibroblasts and urine (at protein level).

### Heparan Sulfate Proteoglycan (Large) / Perlecan Antibody - With BSA and Azide - 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

### Heparan Sulfate Proteoglycan (Large) / Perlecan Antibody - With BSA and Azide - Images



Formalin-fixed, paraffin-embedded human Testicular Carcinoma stained with Heparan Sulfate Monoclonal Antibody (SPM255).

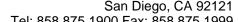
# Heparan Sulfate Proteoglycan (Large) / Perlecan Antibody - With BSA and Azide - Background

This MAb specifically precipitates heterogeneous material of high MW, identified as perlecan, a major heparan-sulfate proteoglycan (HSPG) within all basement membranes and cell surfaces. It does not cross-react with laminin, fibronectin, or dermatran sulfate proteoglycan. Because of perlecan s strategic location and ability to store and protect growth factors, it has been strongly implicated in the control of tumor cell growth and metastatic behavior. Perlecan possesses angiogenic and growth-promoting attributes primarily by acting as a co-receptor for basic fibroblast growth factor (FGF-2). Suppression of perlecan causes substantial inhibition of neoplastic growth and neovascularization. Thus, perlecan is a potent inducer of neoplasm growth and angiogenesis in vivo and therapeutic interventions targeting this key modulator of tumor progression may improve neoplastic treatment.

## Heparan Sulfate Proteoglycan (Large) / Perlecan Antibody - With BSA and Azide - References

Folkvord et. al., J Histochem Cytochem, 1989; 37:105-113. | Couchman et. al., Matrix, 1989; 9:311-321. | Horiguchi et. al., J Histochem Cytochem, 1989; 37:961-970. | Ljubimov et. al., Int J







Cancer, 1992; 50:562-566. | Guelstein et. al., Int J Cancer, 1993; 53:269-277. | Ljubimov et. al., Lab Invest, 1995; 72:461-473. |