

Perlecan (H-300): sc-25848

BACKGROUND

Perlecan is part of a large family of heparan sulfate proteoglycans (HSPGs). As key components of cell surfaces and extracellular matrices, HSPGs modulate growth factor activities and thereby influence cell growth and differentiation. Additionally, HSPGs play a critical role in regulating tumor cell metastasis by mediating cell adhesion and the activities of growth and angiogenic factors. Perlecan consists of five distinct structural domains that interact with a number of matrix molecules, cytokines and growth factors to influence cartilage development and neuromuscular junction activity. Antithrombin, a key regulator of blood coagulation proteases, and TGF β 1 act as inhibitors and stimulators of Perlecan expression, respectively, interactions which may provide avenues for therapeutic intervention in certain types of cancer.

CHROMOSOMAL LOCATION

Genetic locus: HSPG2 (human) mapping to 1p36.12; Hspg2 (mouse) mapping to 4 D3.

SOURCE

Perlecan (H-300) is a rabbit polyclonal antibody raised against amino acids 4092-4391 mapping at the C-terminus of Perlecan of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

Perlecan (H-300) is recommended for detection of Perlecan of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Perlecan (H-300) is also recommended for detection of Perlecan in additional species, including equine, bovine and porcine.

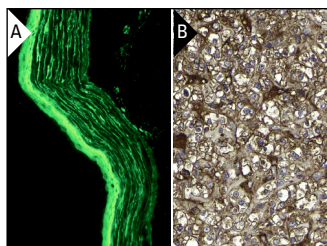
Suitable for use as control antibody for Perlecan siRNA (h): sc-44010, Perlecan siRNA (m): sc-44394, Perlecan shRNA Plasmid (h): sc-44010-SH, Perlecan shRNA Plasmid (m): sc-44394-SH, Perlecan shRNA (h) Lentiviral Particles: sc-44010-V and Perlecan shRNA (m) Lentiviral Particles: sc-44394-V.

Molecular Weight of Perlecan: 400 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



Perlecan (H-300): sc-25848. Immunofluorescence staining of normal mouse eye frozen section showing basement membrane and stroma staining (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human renal cancer tissue showing cytoplasmic and membrane staining of tumor cells. Kindly provided by The Swedish Human Protein Atlas (HPA) program (B).

SELECT PRODUCT CITATIONS

1. Meade, M.L., et al. 2009. Enhanced detection method for corneal protein identification using shotgun proteomics. *Proteome Sci.* 7: E-Published.
2. Jarkovska, K., et al. 2010. Proteome mining of human follicular fluid reveals a crucial role of complement cascade and key biological pathways in women undergoing *in vitro* fertilization. *J. Proteome Res.* 9: 1289-1301.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

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Try **Perlecan (E-6): sc-377219** or **Perlecan (A7L6): sc-33707**, our highly recommended monoclonal alternatives to Perlecan (H-300). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Perlecan (E-6): sc-377219**.