Perlecan (A7L6): sc-33707

**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 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 (A7L6) is a rat monoclonal antibody raised against partially purified preparation of laminin from the EHS mouse tumor.

**PRODUCT**

Each vial contains 200 µg IgG2a in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Perlecan (A7L6) is available conjugated to agarose (sc-33707 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-33707 HRP), 200 µg/ml, for WB, IHC(PE) and ELISA; to either phycoerythrin (sc-33707 PE), fluorescein (sc-33707 FITC), Alexa Fluor® 488 (sc-33707 AF488), Alexa Fluor® 546 (sc-33707 AF546), Alexa Fluor® 594 (sc-33707 AF594) or Alexa Fluor® 647 (sc-33707 AF647), 200 µg/ml, for WB (RGB), IF, IHC(PE) and FCM; and to either Alexa Fluor® 680 (sc-33707 AF680) or Alexa Fluor® 790 (sc-33707 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**APPLICATIONS**

Perlecan (A7L6) is recommended for detection of Perlecan of mouse, rat, human, porcine, bovine, monkey and fish origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).


Molecular Weight of Perlecan: 400 kDa.

**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.

**DATA**

Perlecan (A7L6) sc-33707. Immunofluorescence staining of normal mouse eye frozen section showing basement membrane, stroma and Descemet's membrane staining.

**SELECT PRODUCT CITATIONS**


**PROTOCOLS**

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