

## **Data Sheet**

## **HEPARAN SULFATE PROTEOGLYCAN**

## **ANTIBODY, MONOCLONAL**

**Catalog no.:** AH1003.1 / AH1003.2

**Immunogen:** Purified human small basement membrane heparan sulfate proteoglycan

(HS-PG)

**Host:** Mouse Balb/c

Clone no.: 2H7/G11Isotype:  $IgG_{1kappa}$ 

Matrix: Cell culture supernatant, Protein G purified, 50 mM TRIS pH 7.4

**Specificity:** Monoclonal Ab 2H7/G11 is specific for a core protein epitope of a human

small basement membrane heparan sulfate proteoglycan (HS-PG). mAb 2H7/G11 recognizes an epitope different from that recognized by mAb 1F10/B8 and mAb 2E2/B5. Whereas previously perlecan was the only known basement membrane HS-PG, there is now evidence that at least two other basement membrane HS-PG exist: Agrin, originally discovered as an important component of the neuromuscular junction, and a novel small HS-PG which was isolated from human aorta and kidney. This HS-PG, with a molecular weight of 80-200 kDa (aorta) and 30-160 kDa (kidney) and a core protein size of 24 kDa or 22 kDa, respectively, was localized by immunohistochemistry to the basement membrane. Amino acid

immunohistochemistry to the basement membrane. Amino acid sequence analysis of tryptic peptides indicate, that this small HS-PG is

clearly distinct from perlecan and agrin.

**Contents:**  $10 \mu g / 100 \mu g$  (lyophilized)

Resuspend in  $10 \mu l / 100 \mu l$  aqua bidest.

**Known applications:** ELISA (less than 1µg/ml), Western Blot (1µg/ml), immunohistochemistry

 $(1\mu g/ml)$ 

This antibody has not been tested for use in all applications. This does not necessarily exclude its use for non-tested procedures. The stated dilutions are recommendations only. We suggest that the applicant titrates the antibody in his/her system using appropriate negative/positive controls.

**Store at:** 2-8 °C (lyophilized); - 20 °C (dissolved)

Repeated thawing and freezing must be avoided





**References:** 

- 1. Stöcker G, Meyer HE, Wagener C and Greiling H (1991). Purification and N-terminal amino acid sequence of a chondroitin sulfate / dermatan sulfate proteoglycan isolated from intima / media preparations of human aorta. *Biochem J* **274**: 415-420.
- 2. Heintz B, Stöcker G, Rentz U, Melzer H, Mrowka C, Stickeler E, Sieberth HG, Greiling H, Haubeck HD (1995). Decreased glomerular basement membrane heparan sulfate proteoglycan in essential hypertension. *Hypertension* **25**: 399-407.
- 3. Stefanidis I, Heintz B, Stöcker G, Mrowka C, Sieberth HG, Haubeck HD (1996). Association between heparan sulfate proteoglycan excretion and proteinuria after renal transplantation. *J Am Soc Nephrol* **7**: 1-7
- 4. Stöcker G, Stickeler E, Switalla S, Fischer DC, Greiling H, Haubeck HD (1997). Development of an enzyme immuno assay specific for a core protein epitope of a novel small basement membrane associated heparan sulphate proteoglycan from human kidney. *Eur J Clin Chem Clin Biochem* **35**: 95-99.

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