

Product datasheet for AM02102PU-N

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Heparan-Sulfate-Proteoglycan Mouse Monoclonal Antibody [Clone ID: 1F10/B8]

Product data:

Product Type: Primary Antibodies

Clone Name: 1F10/B8

Applications: ELISA, IHC, WB

Recommended Dilution: ELISA (less than 1 μg/ml).

Western blot (1 µg/ml).

Immunohistochemistry (cryosections, 1 µg/ml).

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

Immunogen: Purified Human small basement membrane Heparan Sulfate Proteoglycan (HS-PG)

Specificity: This Monoclonal antibody 1F10/B8 is specific for a core protein epitope of a Human small

basement membrane Heparan Sulfate proteo-glycan (HS-PG).

AM02102PU recognizes an epitope different from that recognized by clones 2H7/G11 (Cat.-

No AM02103PU) and 2E2/B5 (Cat.-No AM20231PU).

Formulation: 50 mM TRIS pH 7.4

State: Purified

State: Lyophilized purified IgG fraction from Cell Culture Supernatant

Reconstitution Method: Restore in aqua bidest to 1 mg/ml.

Purification: Protein G Chromatography

Conjugation: Unconjugated

Storage: Store lyophilized at 2-8°C for 6 months or at -20°C long term.

After reconstitution store the antibody undiluted at 2-8°C for one month

or (in aliquots) at -20°C long term. Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.





Background:

The principal molecular structure of basement membranes has been elucidated during the past two decades and it was shown that for example in the glomerular basement membrane (GBM) HS-PG are responsible for the selective filtration process. Removal of HS-PG will lead to proteinuria. Whereas previously perlecan was the only known basement membrane HS-PG, there is now evidence that (at least two) other basement membrane HS-PG do exist: Agrin, originally discovered as an important component of the neuromuscular junction and a novel small HS-PG, that 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 immunohisto-chemistry to the basement membrane. Amino acid sequence analysis of tryptic peptides indicate, that this small HS-PG is clearly distinct from perlecan and agrin.

Synonyms:

small Heparan sulfate proteoglycan core protein

Note:

Protocol: 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.