



Product Information Sheet

Polyclonal Anti-Heparanase

Catalogue No. PA1223

Lot No. 09D01

Ig type rabbit IgG

Size 100µg/vial

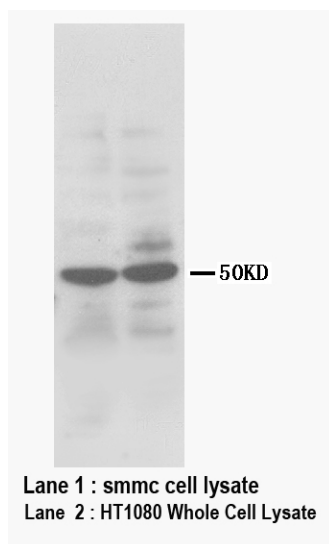
Specificity

Human, mouse, rat.

No cross reactivity with other proteins.

Recommended application

Western blot



Immunogen

A synthetic peptide corresponding to a sequence at the N-terminal of human Heparanase, identical to the related rat and mouse sequence.

Purity

Immunogen affinity purified.

Application

	Concentration	Tested Species	Concluded Species	Antigen Retrieval
WB	1µg/ml	Hu, Rat	Ms	-
IHC-P	-	-	-	-
IHC-F	-	-	-	-
ICC	-	-	-	-

Other applications have not been tested.

Optimal dilutions should be determined by end user.

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Reconstitution

0.2ml of distilled water will yield a concentration of 500µg/ml.

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for longer time.

To reorder contact us at:

Antagene, Inc.

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FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC AND CLINICAL USE.

BACKGROUND

Heparanase, also known as HPSE, is an enzyme that acts both at the cell-surface and within the extracellular matrix to degrade polymeric heparan sulfate molecules into shorter chain length oligosaccharides.^{1,2} Heparanase is an endo-beta-D-glucuronidase capable of cleaving heparan sulfate and has been implicated in inflammation and tumor angiogenesis and metastasis.³ The successful penetration of the endothelial cell layer that lines the interior surface of blood vessels is an important process in the formation of blood borne tumour metastases. Heparan sulfate proteoglycans are major constituents of this layer and it has been shown that increased metastatic potential corresponds with increased heparanase activity for a number of cell lines.^{4,5}

REFERENCE

1. Vlodavsky I, Friedmann Y, Elkin M, Aingorn H, Atzmon R, Ishai-Michaeli R, Bitan M, Pappo O, Peretz T, Michal I, Spector L, Pecker I (July 1999), "Mammalian heparanase: gene cloning, expression and function in tumor progression and metastasis", *Nature medicine* 5 (7): 793–802.
2. Hulett MD, Freeman C, Hamdorf BJ, Baker RT, Harris MJ, Parish CR (July 1999), "Cloning of mammalian heparanase, an important enzyme in tumor invasion and metastasis", *Nature medicine* 5 (7): 803–9.
3. Toyoshima, M.; Nakajima, M. : Human heparanase: purification, characterization, cloning, and expression. *J. Biol. Chem.* 274: 24153-24160, 1999.
4. Nakajima M, Irimura T, Nicolson GL. (1988), "Heparanases and tumor metastasis", *J. Cell. Biochem.* 36 (2): 157–167.
5. Vlodavsky I, Goldshmidt O, Zcharia E, *et al.* (2003), "Mammalian heparanase: involvement in cancer metastasis, angiogenesis and normal development.", *Semin. Cancer Biol.* 12 (2): 121–9.