



Product Information Sheet

Polyclonal Anti-Heparanase (Magnetic Bead Conjugate)

Catalogue No. PA1223-M	Immunogen A synthetic peptide corresponding to a sequence at the N-terminal of human Heparanase, identical to the related rat and mouse sequence.
Lot No. 09D01	
Ig type: rabbit IgG1	Purification Immunogen affinity purified
Size: 100µg/Vial	Contents Each vial contains 1mg/ml Magnetic Bead in PBS, pH 7.2, 0.05mg NaN ₃ .
Specificity Human, mouse, rat. No cross reactivity with other proteins.	Storage Store at 4°C for frequent use.
Recommended application <i>Immunoprecipitation(IP)</i>	Description: This Antagene antibody is immobilized by the covalent reaction of hydrazinonicotinamide-modified antibody with formylbenzamide-modified magnetic beads. It is useful for immunoprecipitation

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.

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