

Product name:	HPA1 Rabbit Polyclonal Antibody
Cat number:	ABN12190
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from the Internal region of human HPSE. AA range:241-290
Reactivity:	Human,Rat,Mouse
Applications:	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000
Molecular Weight:	62kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

Heparan sulfate proteoglycans are major components of the basement membrane and extracellular matrix. The protein encoded by this gene is an enzyme that cleaves heparan sulfate proteoglycans to permit cell movement through remodeling of the extracellular matrix. In addition, this cleavage can release bioactive molecules from the extracellular matrix. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2011],enzyme regulation:Inhibited by EDTA, laminarin sulfate and, to a lower extent, by heparin and sulfamin and activated by calcium and magnesium.,function:Endoglycosidase which is a cell surface and extracellular matrix-degrading enzyme. Cleaves heparan sulfate proteoglycans (HSPGs) into heparan sulfate side chains and core proteoglycans. Also implicated in the extravasation of leukocytes and tumor cell lines. Due to its contribution to metastasis and angiogenesis, it is considered to be a potential target for anti-cancer therapies.,PTM:N-glycosylated. Glycosylation of the 50 kDa subunit appears to be essential for its solubility.,PTM:Proteolytically processed. The cleavage of the 65 kDa form leads to the generation of a linker peptide, 8 kDa and 50 kDa product. The active form, the 8/50 kDa heterodimer, is resistant to degradation. Complete removal of the linker peptide appears to be a prerequisite to the complete activation of the enzyme.,similarity:Belongs to the glycosyl hydrolase 79 family.,subcellular location:Secreted, internalised and transferred to late endosomes/lysosomes as a proheparanase. In lysosomes, it is processed into the active form, the heparanase. The uptake or internalisation of proheparanase is mediated by HSPGs. Heparin appears to be a competitor and retain proheparanase in the extracellular medium.,subunit:The active heterodimer is composed of the 8 and 50 kDa subunits, the proteolytic products.,tissue specificity:Highly expressed in placenta and spleen and weakly expressed in lymph node, thymus, peripheral blood leukocytes, bone marrow, endothelial cells, fetal liver and tumor tissues.,