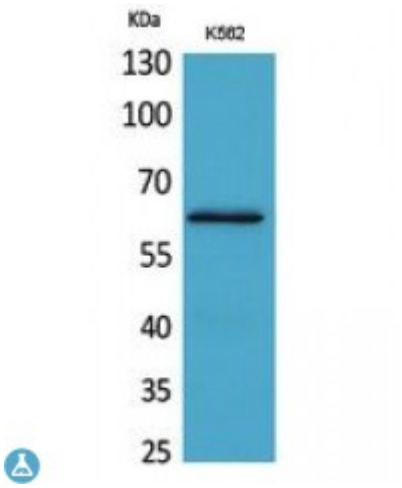
Anti-HPA1 antibody



Description	Rabbit polyclonal to HPA1.

Model	STJ96718
Host	Rabbit
Reactivity	Human
Applications	ELISA, IHC, WB
Immunogen	Synthesized peptide derived from human HPA1.
Immunogen Region	241-290 aa, Internal
Gene ID	10855
Gene Symbol	HPSE
Dilution range	WB 1:500-1:2000IHC-P 1:100-1:300ELISA 1:20000
Specificity	HPA1 Polyclonal Antibody detects endogenous levels of HPA1 protein.
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. Also expressed in hair follicles, specifically in both Henle's and Huxley's layers of inner the root sheath (IRS) at anagen phase.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Heparanase Endo-glucoronidase Heparanase-1 Hpa1 Heparanase 8 kDa subunit Heparanase 50 kDa subunit

Molecular Weight	62 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:5164OMIM:604724
Alternative Names	Heparanase Endo-glucoronidase Heparanase-1 Hpa1 Heparanase 8 kDa subunit Heparanase 50 kDa subunit
Function	Endoglycosidase that cleaves heparan sulfate proteoglycans (HSPGs) into heparan sulfate side chains and core proteoglycans. Participates in extracellular matrix (ECM) degradation and remodeling. Selectively cleaves the linkage between a glucuronic acid unit and an N-sulfo glucosamine unit carrying either a 3-O-sulfo or a 6-O-sulfo group. Can also cleave the linkage between a glucuronic acid unit and an N-sulfo glucosamine unit carrying a 2-O-sulfo group, but not linkages between a glucuronic acid unit and a 2-O-sulfated iduronic acid moiety. It is essentially inactive at neutral pH but becomes active under acidic conditions such as during tumor invasion and in inflammatory processes. Facilitates cell migration associated with metastasis, wound healing and inflammation. Enhances shedding of syndecans, and increases endothelial invasion and angiogenesis in myelomas. Acts as procoagulant by increasing the generation of activation factor X in the presence of tissue factor and activation factor VII. Increases cell adhesion to the extracellular matrix (ECM), independent of its enzymatic activity. Induces AKT1/PKB phosphorylation via lipid rafts increasing cell mobility and invasion. Heparin increases this AKT1/PKB activation. Regulates osteogenesis. Enhances angiogenesis through up-regulation of SRC-mediated activation of VEGF. Implicated in hair follicle inner root sheath differentiation and hair homeostasis.
Cellular Localization	Lysosome membrane. Peripheral membrane protein. Secreted. Nucleus. Proheparanase is secreted via vesicles of the Golgi. Interacts with cell membrane heparan sulfate proteoglycans (HSPGs). Endocytosed and accumulates in endosomes. Transferred to lysosomes where it is proteolytically cleaved to produce the active enzyme. Under certain stimuli, transferred to the cell surface. Associates with lipid rafts. Colocalizes with SDC1 in endosomal/lysosomal vesicles. Accumulates in perinuclear lysosomal vesicles. Heparin retains proheparanase in the extracellular medium .
Post-translational Modifications	Proteolytically processed. The cleavage of the 65 kDa form leads to the generation of a linker peptide, and 8 kDa and 50 kDa products. 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. N-glycosylated. Glycosylation of the 50 kDa subunit appears to be essential for its solubility.

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