Product Name: HPA1 Rabbit Polyclonal Antibody
Catalog #: APRab12190
For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Rat,Mouse
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000
Molecular Weight	62kDa

Antigen Information

Gene Name	HPSE
Alternative Names	HPSE; HEP; HPA; HPA1; HPR1; HPSE1; HSE1; Heparanase; Endo-glucoronidase; Heparanase-1; Hpa1
Gene ID	10855.0
SwissProt ID	Q9Y251
Immunogen	The antiserum was produced against synthesized peptide derived from the Internal region of human HPSE. AA range:241-290

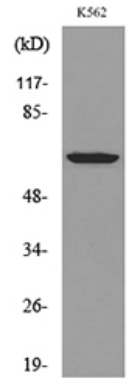
Background

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.,

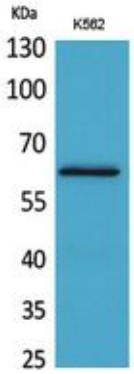
Research Area

Glycosaminoglycan degradation;

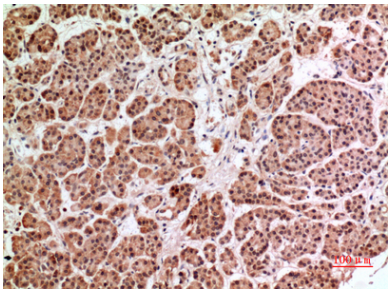
Image Data



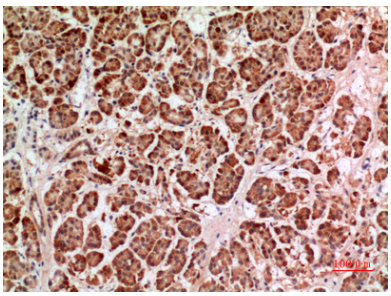
Western blot analysis of lysate from K562 cells, using HPSE Antibody.



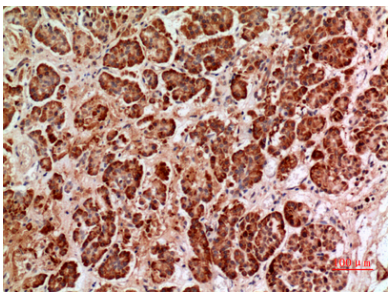
Western Blot analysis of K562 cells using HPA1 Polyclonal Antibody.. Secondary antibody was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded human-pancreas, antibody was diluted at 1:100



Immunohistochemical analysis of paraffin-embedded human-pancreas, antibody was diluted at 1:100



Immunohistochemical analysis of paraffin-embedded human-pancreas, antibody was diluted at 1:100