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Anti-PAI3 Antibody

Catalog # AP51503

Product Information

Application	WB, IHC
Primary Accession	P05154
Reactivity	Human, Mk
Host	Rabbit
Clonality	Polyclonal
Calculated MW	45675

Additional Information

Gene ID	5104
Other Names	PCI; PLANH3; PROCI; Plasma serine protease inhibitor; Acrosomal serine protease inhibitor; Plasminogen activator inhibitor 3; PAI-3; PAI3; Protein C inhibitor; PCI; Serpin A5
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human PAI3. The exact sequence is proprietary.
Dilution	WB~~ 1:1000 IHC~~1:100~500
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	SERPINA5
Synonyms	PCI, PLANH3, PROCI
Function	Heparin-dependent serine protease inhibitor acting in body fluids and secretions. Inactivates serine proteases by binding irreversibly to their serine activation site. Involved in the regulation of intravascular and extravascular proteolytic activities. Plays hemostatic roles in the blood plasma. Acts as a procoagulant and pro-inflammatory factor by inhibiting the anticoagulant activated protein C factor as well as the generation of activated protein C factor by the thrombin/thrombomodulin complex. Acts as an anticoagulant factor by inhibiting blood coagulation factors like prothrombin, factor XI, factor Xa, plasma kallikrein and fibrinolytic enzymes such as tissue- and urinary-type plasminogen activators. In seminal plasma, inactivates several serine proteases implicated in the reproductive system. Inhibits the serpin acrosin; indirectly protects component of the male genital tract from being

degraded by excessive released acrosin. Inhibits tissue- and urinary-type plasminogen activator, prostate-specific antigen and kallikrein activities; has a control on the sperm motility and fertilization. Inhibits the activated protein C- catalyzed degradation of SEMG1 and SEMG2; regulates the degradation of semenogelin during the process of transfer of spermatozoa from the male reproductive tract into the female tract. In urine, inhibits urinary- type plasminogen activator and kallikrein activities. Inactivates membrane-anchored serine proteases activities such as MPRSS7 and TMPRSS11E. Inhibits urinary-type plasminogen activator-dependent tumor cell invasion and metastasis. May also play a non-inhibitory role in seminal plasma and urine as a hydrophobic hormone carrier by its binding to retinoic acid.

Cellular Location

Secreted, extracellular space. Note=Localized on the plasma membrane overlying the acrosomal head of spermatozoa of ependymal spermatozoa and ejaculated sperm. Localized at the equatorial segment of acrosome-reacted spermatozoa. Localized in alpha granules in resting platelets and on the external plasma membrane and within the surface-connected cannalicular system in activated platelets

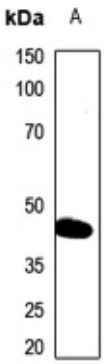
Tissue Location

Predominantly expressed in the epithelium of seminal vesicles. Expressed in the proximal tubular epithelium of the kidney. Expressed in the superficial and more differentiated epidermal keratinocytes of the skin. Expressed in megakaryocytes and platelets Expressed poorly in kidney tumor cells compared to non tumor kidney tissues. Expressed in spermatozoa. Present in very high concentration in seminal plasma. Present in high concentration in plasma, synovial and Graaf follicle fluids. Present in low concentration in breast milk and in amniotic fluids. Present in very low concentration in urine, cerebrospinal fluids, saliva and tears (at protein level). Strongly expressed in liver. Expressed in kidney, spleen, pancreas, skeletal muscle, heart, testes, ovary, interstitial Leydig cells, epididymal glands, seminal vesicles and prostate.

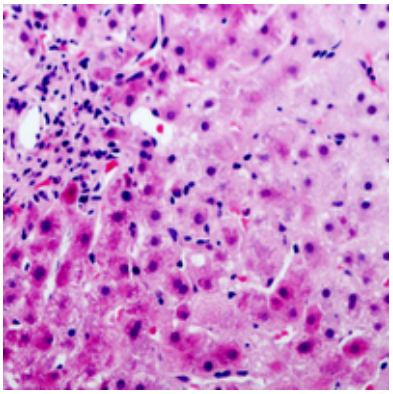
References

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Images



Western blot analysis of PAI3 expression in Hela (A) whole cell lysates. (Predicted band size: 45 kD; Observed band size: 46 kD)



Immunohistochemical analysis of PAI3 staining in human liver cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. AEC was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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