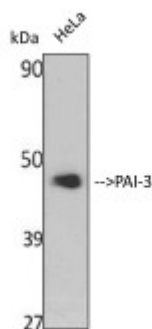


Anti-PAI-3 antibody



Description	Rabbit polyclonal to PAI-3.
Model	STJ94936
Host	Rabbit
Reactivity	Human
Applications	ELISA, IHC, WB
Immunogen	Synthesized peptide derived from human PAI-3
Immunogen Region	230-310 aa, Internal
Gene ID	5104
Gene Symbol	SERPINA5
Dilution range	WB 1:500-1:2000IHC 1:100-1:300ELISA 1:20000
Specificity	PAI-3 Polyclonal Antibody detects endogenous levels of PAI-3 protein.
Tissue Specificity	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 concen
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).

Protein Name	Plasma serine protease inhibitor Acrosomal serine protease inhibitor Plasminogen activator inhibitor 3 PAI-3 PAI3 Protein C inhibitor PCI Serpin A5
Molecular Weight	42 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:8723OMIM:601841
Alternative Names	Plasma serine protease inhibitor Acrosomal serine protease inhibitor Plasminogen activator inhibitor 3 PAI-3 PAI3 Protein C inhibitor PCI Serpin A5
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 proinflammatory 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.
Sequence and Domain Family	The reactive center loop (RCL) extends out from the body of the protein and directs binding to the target protease. The protease cleaves the serpin at the reactive site within the RCL, establishing a covalent linkage between the carboxyl group of the serpin reactive site and the serine hydroxyl of the protease. The resulting inactive serpin-protease complex is highly stable.
Cellular Localization	Secreted, extracellular space. 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.

**Post-translational
Modifications**

N- and O-glycosylated. N-glycosylation consists of a mixture of sialylated bi- (including sialyl-Lewis X epitopes), tri- and tetra-antennary complex-type chains; affects the maximal heparin- and thrombomodulin-enhanced rates of thrombin inhibition. O-glycosylated with core 1 or possibly core 8 glycans. Further modified with 2 sialic acid residues. Proteolytically cleaved. Inhibition of proteases is accompanied by formation of a stable enzyme-inhibitor complex and by degradation of the serpin to lower molecular weight derivatives. Proteolytically cleaved at the N-terminus; inhibits slightly the heparin- and thrombomodulin-enhanced rates of thrombin inhibition.