SunLong Biotech Co.,LTD
Tel: 0086-571- 56623320 Fax:0086-571- 56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Rabbit Anti-PAI1 antibody

SL1704R

Product Name:	PAI1
Chinese Name:	纤溶酶原激活物抑制因子抗体
Alias:	Clade E; Endothelial plasminogen activator inhibitor; Nexin; PAI 1; PAI; PAI-1; PAI1_HUMAN; PLANH1; Plasminogen activator inhibitor 1; Plasminogen activator inhibitor type 1; Serine (or cysteine) proteinase inhibitor; Serine (or cysteine) proteinase inhibitor clade E (nexin plasminogen activator inhibitor type 1) member 1; Serpin E1; Serpin peptidase inhibitor clade E (nexin plasminogen activator inhibitor type 1) member 1; Serpin peptidase inhibitor clade E; Serpine 1; Serpine1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Rabbit,Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	43kDa
Cellular localization:	Secretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human PAI-1:301-402/402
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	PAI1 (plasminogen activator inhibitor 1) is originally cloned from human endothelial cell (Pannekoek 1986, Ginsburg 1986) and rat hepatoma cell 3 cDNA libraries. As a

member of the serpin family of serine protease inhibitors, PAI1 inhibits both tissue type plasminogen activator (tPA) and urokinase type plasminogen activator (uPA). High PAI1 levels are associated with an increased risk of thromboembolic disease while PAI1 deficiency may represent an inherited autosomal recessive bleeding disorder.

Function:
Serine protease inhibitor. This inhibitor acts as 'bait' for tissue plasminogen activator, urokinase, protein C and matriptase-3/TMPRSS7. Its rapid interaction with PLAT may function as a major control point in the regulation of fibrinolysis.

Subunit:
Forms protease inhibiting heterodimer with TMPRSS7. Interacts with VTN. Binds LRP1B; binding is followed by internalization and degradation.

Subcellular Location:
Secreted

Tissue Specificity:
Found in plasma and platelets and in endothelial, hepatoma and fibrosarcoma cells

Post-translational modifications:
Inactivated by proteolytic attack of the urokinase-type (u-PA) and the tissue-type (TPA), cleaving the 369-Arg-|-Met-370 bond.

DISEASE:
Plasminogen activator inhibitor-1 deficiency (PAI-1D) [MIM:613329]: A hematologic disorder characterized by increased bleeding after trauma, injury, or surgery. Affected females have menorrhagia. The bleeding defect is due to increased fibrinolysis of fibrin blood clots due to deficiency of plasminogen activator inhibitor-1, which inhibits tissue and urinary activators of plasminogen. Note=The disease is caused by mutations affecting the gene represented in this entry.
Note=High concentrations of SERPINE1 seem to contribute to the development of venous but not arterial occlusions.

Similarity:
Belongs to the serpin family

SWISS:
P05121

Gene ID:
5054

Database links:

Entrez Gene: 5054Human

	Entrez Gene: 18787Mouse Entrez Gene: 396945Pig Entrez Gene: 24617Rat Omim: 173360Human SwissProt: P13909Cow SwissProt: P05121Human SwissProt: P22777Mouse SwissProt: P79335Pig SwissProt: P20961Rat Unigene: 414795Human Unigene: 713079Human Unigene: 250422Mouse Unigene: 29367Rat **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. PAI-1是一种单链glycoprotein，其生理作用很多： （1）与组织型纤溶酶原激活物（tissue plasminogen activator，t-PA）形成1：1的复合物而使t-PA失活； （2）保护基底膜不被血浆来源的酶所降解； （3）保护细胞间的接触面而维持组织结构的完整性； （4）在结缔组织演变、凝血、纤溶、补体激活和炎症反应等过程中具有抑制蛋白降解作用； （5）在细胞周期中，PAI-1转录水平的变化及其在细胞内的积聚，对细胞形态的维持、细胞与其间质的粘附、细胞增殖、Signal transduction及基因表达等都有重要意义；