

**Goat Anti-PAI1 / SERPINE1 Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF1777a****Specification**

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**Goat Anti-PAI1 / SERPINE1 Antibody - Product Information**

Application	WB, IHC, Pep-ELISA
Primary Accession	<a href="#">P05121</a>
Other Accession	<a href="#">NP_001158885</a> , <a href="#">5054</a>
Reactivity	Human
Predicted	Dog
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	45060

**Goat Anti-PAI1 / SERPINE1 Antibody - Additional Information****Gene ID** 5054**Other Names**

Plasminogen activator inhibitor 1, PAI, PAI-1, Endothelial plasminogen activator inhibitor, Serpin E1, SERPINE1, PAI1, PLANH1

**Dilution**WB~~1:1000  
IHC~~1:100~500  
Pep-ELISA~~N/A**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-PAI1 / SERPINE1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-PAI1 / SERPINE1 Antibody - Protein Information****Name** SERPINE1**Synonyms** PAI1, PLANH1

### Function

Serine protease inhibitor. Inhibits TMPRSS7 (PubMed:<a href="http://www.uniprot.org/citations/15853774" target="\_blank">15853774</a>). Is a primary inhibitor of tissue-type plasminogen activator (PLAT) and urokinase-type plasminogen activator (PLAU). As PLAT inhibitor, it is required for fibrinolysis down-regulation and is responsible for the controlled degradation of blood clots (PubMed:<a href="http://www.uniprot.org/citations/17912461" target="\_blank">17912461</a>, PubMed:<a href="http://www.uniprot.org/citations/8481516" target="\_blank">8481516</a>, PubMed:<a href="http://www.uniprot.org/citations/9207454" target="\_blank">9207454</a>, PubMed:<a href="http://www.uniprot.org/citations/21925150" target="\_blank">21925150</a>). As PLAU inhibitor, it is involved in the regulation of cell adhesion and spreading (PubMed:<a href="http://www.uniprot.org/citations/9175705" target="\_blank">9175705</a>). Acts as a regulator of cell migration, independently of its role as protease inhibitor (PubMed:<a href="http://www.uniprot.org/citations/15001579" target="\_blank">15001579</a>, PubMed:<a href="http://www.uniprot.org/citations/9168821" target="\_blank">9168821</a>). It is required for stimulation of keratinocyte migration during cutaneous injury repair (PubMed:<a href="http://www.uniprot.org/citations/18386027" target="\_blank">18386027</a>). It is involved in cellular and replicative senescence (PubMed:<a href="http://www.uniprot.org/citations/16862142" target="\_blank">16862142</a>). Plays a role in alveolar type 2 cells senescence in the lung (By similarity). Is involved in the regulation of cementogenic differentiation of periodontal ligament stem cells, and regulates odontoblast differentiation and dentin formation during odontogenesis (PubMed:<a href="http://www.uniprot.org/citations/25808697" target="\_blank">25808697</a>, PubMed:<a href="http://www.uniprot.org/citations/27046084" target="\_blank">27046084</a>).

### Cellular Location

Secreted.

### Tissue Location

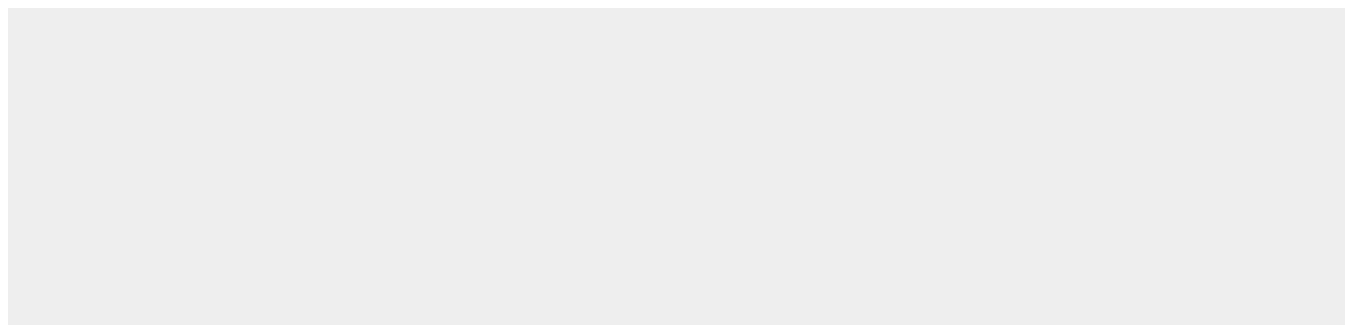
Expressed in endothelial cells (PubMed:2430793, PubMed:3097076). Found in plasma, platelets, and hepatoma and fibrosarcoma cells.

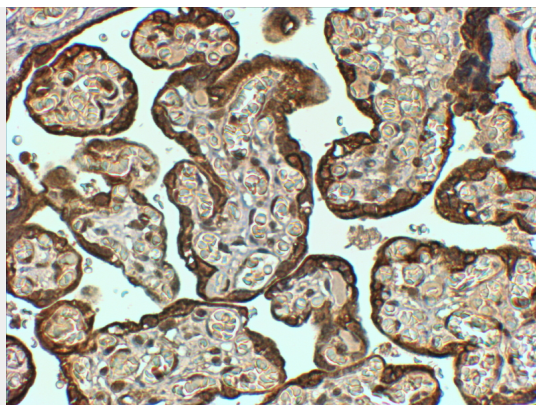
## Goat Anti-PAI1 / SERPINE1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

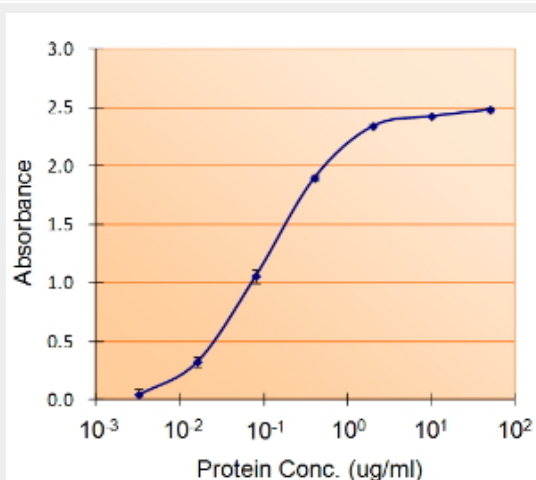
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Goat Anti-PAI1 / SERPINE1 Antibody - Images

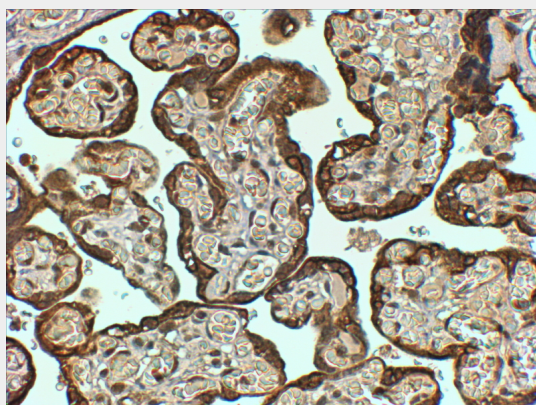




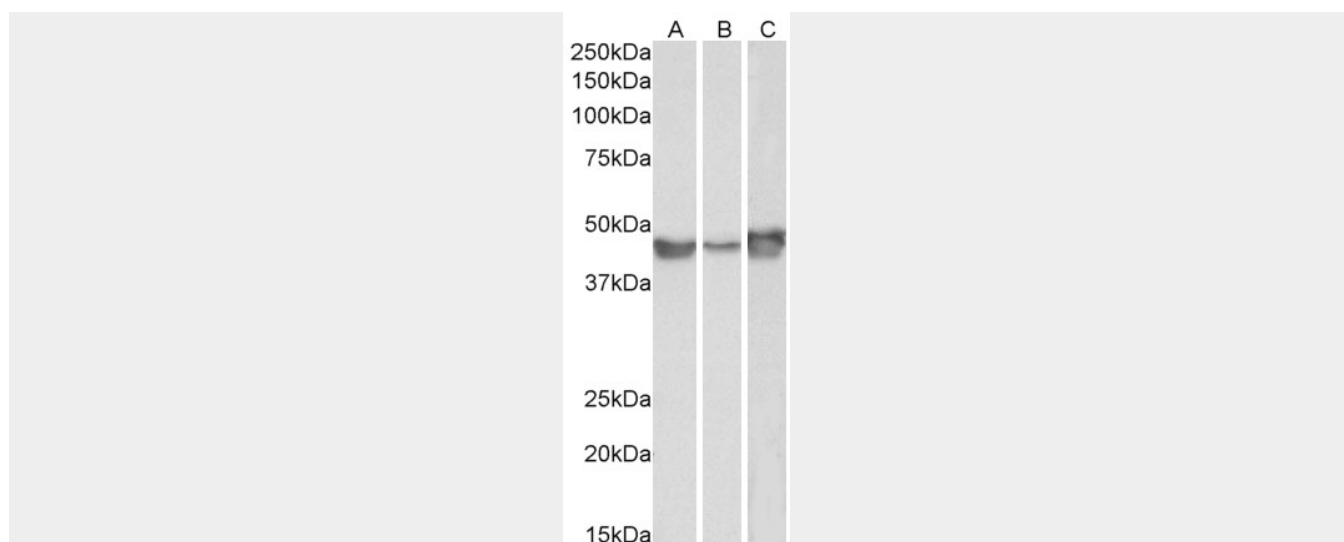
AF1777a (4 µg/ml) staining of paraffin embedded Human Placenta. Steamed antigen retrieval with Tris/EDTA buffer pH 9, HRP-staining.



AF1777a (1.5ug/ml) as the reporter with EB002011 as the capture rabbit antibody (2.5ug/ml).



EB06720 (4µg/ml) staining of paraffin embedded Human Placenta. Steamed antigen retrieval with Tris/EDTA buffer pH 9, HRP-staining.



EB06720 (0.1µg/ml) staining of A549 (A), HepG2 (B) and HeLa (C) lysates (35µg protein in RIPA buffer). Detected by chemiluminescence.

#### **Goat Anti-PAI1 / SERPINE1 Antibody - Background**

This gene encodes a member of the serine proteinase inhibitor (serpin) superfamily. This member is the principal inhibitor of tissue plasminogen activator (tPA) and urokinase (uPA), and hence is an inhibitor of fibrinolysis. Defects in this gene are the cause of plasminogen activator inhibitor-1 deficiency (PAI-1 deficiency), and high concentrations of the gene product are associated with thrombophilia. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.

#### **Goat Anti-PAI1 / SERPINE1 Antibody - References**

The Role of Plasminogen Activator Inhibitor-1 and Angiotensin-Converting Enzyme Gene Polymorphisms in Bronchopulmonary Dysplasia. Ince DA, et al. Genet Test Mol Biomarkers, 2010 Sep 6. PMID 20818980. Tumour budding, uPA and PAI-1 are associated with aggressive behaviour in colon cancer. Mørkl B, et al. J Surg Oncol, 2010 Sep 1. PMID 20740581. Association of PAI-1 gene polymorphism with survival and chemotherapy-related vascular toxicity in testicular cancer. de Haas EC, et al. Cancer, 2010 Aug 24. PMID 20737565. Failure to lyse venous thrombi because of elevated plasminogen activator Inhibitor 1 (PAI-1) and 4G polymorphism of its promotor genome (The PAI-1/4G Syndrome). Bern MM, et al. Clin Appl Thromb Hemost, 2010 Oct. PMID 20724304. Evaluation of the Association of Urokinase Plasminogen Activator System Gene Polymorphisms with Susceptibility and Pathological Development of Hepatocellular Carcinoma. Weng CJ, et al. Ann Surg Oncol, 2010 Aug 13. PMID 20706793.