

# SERPINE1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12919C

#### Specification

### **SERPINE1 Antibody (Center) - Product Information**

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Antigen Region FC, WB,E <u>P05121</u> <u>NP\_000593.1</u>, <u>NP\_001158885.1</u> Human Rabbit Polyclonal Rabbit IgG 188-216

### **SERPINE1** Antibody (Center) - Additional Information

Gene ID 5054

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

Target/Specificity

This SERPINE1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 188-216 amino acids from the Central region of human SERPINE1.

**Dilution** FC~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

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

**Precautions** SERPINE1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

### **SERPINE1** Antibody (Center) - Protein Information

Name SERPINE1



### Synonyms PAI1, PLANH1

**Function** Serine protease inhibitor. Inhibits TMPRSS7 (PubMed:<u>15853774</u>). 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:<u>17912461</u>, PubMed:<u>8481516</u>, PubMed:<u>9207454</u>, PubMed:<u>21925150</u>). As PLAU inhibitor, it is involved in the regulation of cell adhesion and spreading (PubMed:<u>9175705</u>). Acts as a regulator of cell migration, independently of its role as protease inhibitor (PubMed:<u>15001579</u>, PubMed:<u>9168821</u>). It is required for stimulation of keratinocyte migration during cutaneous injury repair (PubMed:<u>18386027</u>). It is involved in cellular and replicative senescence (PubMed:<u>16862142</u>). 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:<u>25808697</u>, PubMed:<u>27046084</u>).

Cellular Location Secreted.

### **Tissue Location**

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

# SERPINE1 Antibody (Center) - Protocols

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

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### SERPINE1 Antibody (Center) - Images



Western blot analysis of SERPINE1 (arrow) using rabbit polyclonal SERPINE1 Antibody (Center) (Cat. #AP12919c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the SERPINE1 gene.





SERPINE1 Antibody (Center) (Cat. #AP12919c) flow cytometric analysis of U251 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

# SERPINE1 Antibody (Center) - 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.

# SERPINE1 Antibody (Center) - References

Ma, Z., et al. Biochem. Biophys. Res. Commun. 400(4):569-574(2010) Ince, D.A., et al. Genet Test Mol Biomarkers 14(5):643-647(2010) Bern, M.M., et al. Clin. Appl. Thromb. Hemost. 16(5):574-578(2010) Markl, B., et al. J Surg Oncol 102(3):235-241(2010) de Haas, E.C., et al. Cancer (2010) In press :