

# Recombinant Human SERPINE1 Protein

Cat. No. SERPINE1-5511H Lot. No. (See product label)

## SPECIFICATION

<b>Product Overview</b>	SERPINE1 was expressed in E. coli, with a molecule weight of 97.0 kDa.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>Description</b>	<p>SERPINE1 also known as endothelial plasminogen activator inhibitor or serpin E1 is a protein that in humans is encoded by the SERPINE1 gene. SERPINE1 is a serine protease inhibitor (serpin) that functions as the principal inhibitor of tissue plasminogen activator (tPA) and urokinase (uPA), the activators of plasminogen and hence fibrinolysis (the physiological breakdown of bloodclots). It is a serine protease inhibitor (serpin) protein (SERPINE1). The other PAI, plasminogen activator inhibitor-2 (PAI-2) is secreted by the placenta and only present in significant amounts during pregnancy. In addition, protease nexin acts as an inhibitor of tPA and urokinase. PAI-1, however, is the main inhibitor of the plasminogen activators.</p>
<b>Molecule Weight</b>	97.0 kDa
<b>Form</b>	Liquid in 0.1 M Tris-HCl + 0.15 M NaCl, pH 7.4.
<b>Concentration</b>	1.0 mg/ml
<b>Storage</b>	Store in working aliquots at -80°C. Avoid repeated freeze-thaw cycles.
<b>Official Symbol</b>	SERPINE1

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**Pathways**

Adipogenesis; BMAL1:CLOCK/NPAS2 Activates Gene Expression; Blood Clotting Cascade; Complement and Coagulation Cascades; Dissolution of Fibrin Clot; E2F transcription factor network; HIF-2-alpha transcription factor network; Platelet activation; Platelet degranulation; Regulation of nuclear SMAD2/3 signaling; Response to elevated platelet cytosolic Ca<sup>2+</sup>; Selenium Pathway; Senescence and Autophagy; TGF Beta Signaling Pathway; p53 signaling pathway

**GENE INFORMATION**
**Gene Name**

SERPINE1 serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 1 [ Homo sapiens ]

**Synonyms**

SERPINE1; serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 1; PAI; PAI1; PAI-1; PLANH1; plasminogen activator inhibitor 1; serpinE1; OTTHUMP00000211478; endothelial plasminogen activator inhibitor; serine(or cysteine) proteinase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 1

**Gene ID**

5054

**mRNA Refseq**

NM\_000602

**Protein Refseq**

NP\_000593

**MIM**

173360

**UniProt ID**

P05121

**Chromosome Location**

7q21.3-q22

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**Function**

peptidase inhibitor activity; protease binding; protein binding; contributes to receptor binding; serine-type endopeptidase inhibitor activity

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