Recombinant Human SERPINE1 Protein

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

SPECIFICATION

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

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Pathways	Adipogenesis;BMAL1:CLOCK/NPAS2 Activates Gene Expression; Blood Clotting Cascade;Complement and Coagulation Cascades; Dissolution of Fibrin Clot; E2Ftranscription factor network; HIF-2-alpha transcription factor network;Platelet activation; Platelet degranulation; Regulation of nuclear SMAD2/3signaling; Response to elevated platelet cytosolic Ca2+; Selenium Pathway;Senescence and Autophagy; TGF Beta Signaling Pathway; p53 signaling pathway

GENE INFORMATION

Gene Name	SERPINE1 serpin peptidaseinhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 1[Homo sapiens]
Synonyms	SERPINE1; serpinpeptidase 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 activatorinhibitor 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

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Function	peptidase inhibitoractivity; protease binding; protein binding; contributes to receptor binding;serine-type endopeptidase inhibitor activity
PAI-1 in complexwith the SMB domain of Vitronectin PDB 1OC0.	

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA