

Recombinant Human SERPINE1

Cat. No. SERPINE1-28262TH **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant full length glycosylated Human PAI1 containing mutations which confer additional stability to the otherwise labile molecule, expressed in insect cells; MWt 46kDa.
Species	Human
Description	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.
Tissue specificity	Found in plasma and platelets and in endothelial, hepatoma and fibrosarcoma cells.
Biological activity	Kinetic Data: Second order rate constants for inhibition of: uPA = $6.3 \times 10^6 \text{ M}^{-1}\text{s}^{-1}$ tPA = $5.7 \times 10^6 \text{ M}^{-1}\text{s}^{-1}$ 5% active by uPA titration
Form	Liquid
Purity	>95% by SDS-PAGE
Storage buffer	Preservative: None Constituents: 0.1M Sodium chloride, 0.05M Sodium phosphate, 1mM EDTA, pH 6.6

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Storage	Shipped on dry ice. Upon delivery aliquot and store at -80oC. Avoid freeze / thaw cycles.
Sequence Similarities	Belongs to the serpin family.
Full Length	Full L.
GENE INFORMATION	
Gene Name	SERPINE1 serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 1 [Homo sapiens]
Official Symbol	SERPINE1
Synonyms	SERPINE1; serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 1; PAI1, PLANH1, serine (or cysteine) proteinase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 1; plasminogen activator inh
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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Pathway	Adipogenesis, organism-specific biosystem; BMAL1:CLOCK/NPAS2 Activates Gene Expression, organism-specific biosystem; Blood Clotting Cascade, organism-specific biosystem; Chagas disease (American trypanosomiasis), organism-specific biosystem; Chagas disease (American trypanosomiasis), conserved biosystem;
Function	peptidase inhibitor activity; protease binding; protein binding; contributes_to receptor binding; serine-type endopeptidase inhibitor activity;

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