

Product datasheet for **AR09064PU-L**

SERPINE1 / PAI1 (24-402, His-tag) Human Protein

Product data:

Product Type:	Recombinant Proteins
Description:	SERPINE1 / PAI1 (24-402, His-tag) human recombinant protein, 0.5 mg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	<u>MGSSHHHHHH</u> SSGLVPRGSH MVHHPPSYVA HLASDFGVRV FQQVAQASKD RNWVFSYGV ASVLAMLQLT TGGETQQIQ AAMGFKIDDK GMAPALRHLY KELMGPNWVKD EISTTDAIFV QRDLKLVQGF MPHFFRLFRS TVKQVDFSEV ERARFIINDW VKTHTKGMIS NLLGKGAVDQ LTRLVLVNAL YFNGQWKTPF PDSSTHRRFL HKSDGSTVSV PMMAQTNKFN YTEFTTPDGH YYDILELPYH GDTLSMFIAA PYEKEVPLSA LTNILSAQLI SHWKGNMTRL PRLVLPKFS LETEVDLRKP LENLGMTDMF RQFQADFTSL SDQEPLHVAQ ALQKVKIEVN ESGTVASSST AVIVSARMAP EEIIMDRPFL FVVRHNPTGT VLFMGQVMEP
Tag:	His-tag
Predicted MW:	45 kDa
Concentration:	lot specific
Purity:	≥95 by SDS PAGE
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: 150 mM Na ₂ HPO ₄ , pH 6.6, 0.5 mM NaCl, 2 mM Glutathione, 0.01% Tween-80



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Bioactivity:	Specific: The IC50 value is < 56 nM. Measured by its ability to inhibit uPA cleavage of the substrate Z - GGR - AMC. Activity Assay: 1. Prepare a recombinant PAI - 1 with various concentrations (2 , 000 nM, 1 , 000 nM, 500 nM, 250 nM, 125 nM) in assay buffer. (Assay buffer: 50 mM Tris - HCl pH 8.0, 0 .01% Tween 20) 2. Mix equal volumes of the PAI - 1 protein and diluted 2 ug/ml uPA (Prospec . Cat No. ENZ - 264) 3. Incubate at room temperature for 15 minutes. 4 . Dilute incubated reaction mixtures (PAI - 1, uPA) by a 5 fold dilution in assay buffer, mix 50ul of 200uM substrate (Z - GGR - AMC) and diluted mixtures. 5 . Read excitation wavelength 355 nm and emission wavelength 460nm for 10 minutes. - Z - GGR - AMC (CALBIOCHEM, Cat.No, 672159) - 96 well Polystyrene Microplate, black (greniner bio - one, Cat.No , 655077) - Fluorescent plate reader (PerkinElmer, VICTORX3)
Preparation:	Liquid purified protein
Protein Description:	Recombinant human PAI-1, fused to His tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.
Storage:	Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	NP_000593
Locus ID:	5054
UniProt ID:	P05121 , A0A024QYT5
Cytogenetics:	7q22.1
Synonyms:	PAI; PAI-1; PAI1; PLANH1
Summary:	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. The protein also functions as a component of innate antiviral immunity. 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. [provided by RefSeq, Aug 2020]
Protein Families:	Druggable Genome, Secreted Protein
Protein Pathways:	Complement and coagulation cascades, p53 signaling pathway

Product images: