

Product datasheet for AR09064PU-N

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

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

Product data:

Product Type: Recombinant Proteins

Description: SERPINE1 / PAI1 (24-402, His-tag) human recombinant protein, 0.1 mg

Species: Human E. coli **Expression Host:**

Expression cDNA Clone

MGSSHHHHHH SSGLVPRGSH MVHHPPSYVA HLASDFGVRV FQQVAQASKD RNVVFSPYGV or AA Sequence: ASVLAMLQLT TGGETQQQIQ AAMGFKIDDK GMAPALRHLY KELMGPWNKD EISTTDAIFV

QRDLKLVQGF MPHFFRLFRS TVKQVDFSEV ERARFIINDW VKTHTKGMIS NLLGKGAVDQ LTRLVLVNAL YFNGQWKTPF PDSSTHRRLF HKSDGSTVSV PMMAQTNKFN YTEFTTPDGH

YYDILELPYH GDTLSMFIAA PYEKEVPLSA LTNILSAQLI SHWKGNMTRL PRLLVLPKFS 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 Na₂HPO₄, pH 6.6, 0.5 mM NaCl, 2 mM Glutathione, 0.01% Tween-80



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: <u>P05121</u>, <u>A0A024QYT5</u>

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:

