

Plasminogen Activator Inhibitor 2 (PAI2) Active Protein | PAI2 active protein

Active Plasminogen Activator Inhibitor 2 (PAI2)

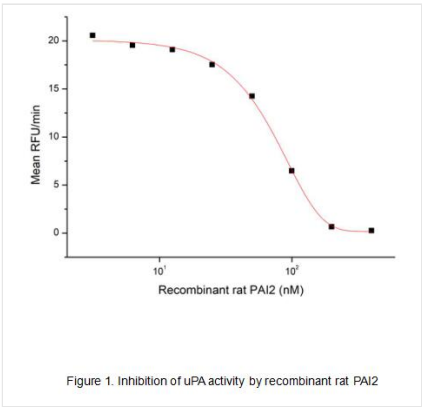
CATALOG # AAA161741	HOST 293F cell	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Plasminogen Activator Inhibitor 2 (PAI2); Active Plasminogen Activator Inhibitor 2 (PAI2); Plasminogen Activator Inhibitor 2; PAI2 active protein (eukaryotic; 293F cell); Rat; SERPINB2; PLANH2; Serpin Peptidase Inhibitor Clade B Member 2; Monocyte Arg-serpin; Placental plasminogen activator inhibitor; Serpin B2; Urokinase inhibitor4; PAI2 active protein

PRODUCT SPECIFICATIONS

Host	293F cell
Purity/Purification	Greater than 95% by SDS-PAGE
Form/Format	Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Sequence	Met1~Pro41 6
Applicable Applications for PAI2 active protein	Activity Assay, Cell Culture
Species	Rat
Expression System	Eukaryotic expression
Tag	N-terminal His Tag and C-terminal Fc Region of Human IgG1
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	5
Research Area	Hematology, Reproductive science
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months

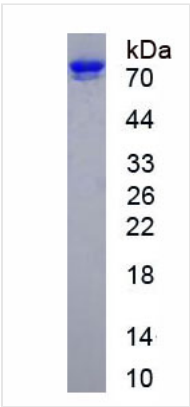


Bioactivity

Serpin B2, also known as PAI-2, is an approximately 60 kDa serine protease inhibitor. It is primarily secreted by macrophages and monocytes and can form disulfide-linked multimers. Serpin B2 inhibits both the urokinase-type and tissue-type plasminogen activators (uPA and tPA). Serpin B2 also promotes the clearance of uPA by enhancing its binding and uptake by LRP. It limits fibril formation by Huntington protein (HTT) and beta-Amyloid peptides. It promotes Th2 biased immune responses and is important for intestinal CCL2 production, monocyte recruitment, and nematode clearance. A non-glycosylated form of Serpin B2 is retained intracellularly where it interferes with TNF- α induced apoptosis by protecting the Retinoblastoma protein (RB1) from calpain digestion. It also inhibits proteasome activity in activated endothelial cells. The activity of recombinant rat PAI-2 was measured by its ability to inhibit uPA cleavage of a peptide substrate, N-carbobenzoyloxy-Gly-Gly-Arg-7-amido-4-methylcoumarin (Z-GGR-AMC) in the assay buffer 50 mM Tris, 0.01% Tween 20, pH 8.5. The 50 μ l different concentrations of rrPAI-2 (MW: 78.3 KD) was incubated with 50ul 2ug/ml rhuPA (EPA140Mu61) at room temperature for 15 minutes. Loading 50 μ L of the incubated mixtures into empty wells of a plate, and start the reaction by adding 50 μ L of 200 μ M substrate (Z-GGR-AMC). Include a substrate blank containing 50 μ L of assay buffer and 50 μ L of 200 μ M substrate. Then read at excitation and emission wavelengths of 380 nm and 460 nm, respectively, in kinetic mode for 5 minutes. The result was shown in Figure 1 and it was obvious that recombinant rat PAI2 significantly decreased uPA activity. The inhibition IC50 was

SDS-PAGE

Figure. SDS-PAGE



ADDITIONAL INFORMATION

Product Categories/Family for PAI2 active protein	Active proteins
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NCBI AND UNIPROT INFORMATION

NCBI GI #	11067431
NCBI GeneID	60325
NCBI Accession #	NP_067728.1
NCBI GenBank Nucleotide #	NM_021696.2
UniProt Accession #	P29524
Molecular Weight	47,248 Da
NCBI Official Full Name	plasminogen activator inhibitor 2 type A
NCBI Official Synonym Full Names	serpin family B member 2
NCBI Official Symbol	Serpinb2
NCBI Official Synonym Symbols	Pai2a
NCBI Protein Information	plasminogen activator inhibitor 2 type A

UniProt Protein Name	Plasminogen activator inhibitor 2 type A
UniProt Gene Name	Serpib2
UniProt Synonym Gene Names	Pai2; Planh2; PAI-2; PAI2A

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/293f-active-protein/plasminogen-activator-inhibitor-2-pai2/161741>