

Product datasheet for RC228311

PAI1 (SERPINE1) (NM_001165413) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PAI1 (SERPINE1) (NM_001165413) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PAI1
Synonyms:	PAI; PAI-1; PAI1; PLANH1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC228311 representing NM_001165413 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCAGATGTCTCCAGCCCTCACCTGCCTAGTCTGGCCTGGCCCTTGCTTTGGTGAAGGGTCTGCTG
TGCACCATCCCCATCCTACGTGGCGCAGGCTCCAAGGACCGCAACGTGGTTTTCTCACCTATGGGGT
GGCCTCGGTGTTGGCCATGCTCCAGCTGACAACAGGAGGAGAAACCCAGCAGCAGATTCAAGCAGCTATG
GGATTCAAGATTGATGACAAGGGCATGGCCCCGCCCTCCGGCATCTGTACAAGGAGCTCATGGGCCAT
GGAACAAGGATGAGATCAGCACACAGACGCGATCTTCGTCACGCGGGATCTGAAGCTGGTCCAGGGCTT
CATGCCCACTTCTTCAGGCTGTTCCGGAGCACGGTCAAGCAAGTGGACTTTTCAGAGGTGGAGAGACCC
AGATTCATCATCAATGACTGGGTGAAGACACACAAAAGGTATGATCAGCAACTTGCTTGGGAAAGGAG
CCGTGGACCAGCTGACACGGCTGGTGTGGTGAATGCCCTCTACTTCAACGGCCAGTGGAAAGACTCCCTT
CCCCGACTCCAGCACCCACCGCCGCTCTTCCACAAAATCAGACGGCAGCACTGTCTCTGTGCCATGATG
GCTCAGACCAACAAGTTCAACTATACTGAGTTCACCACGCCCGATGGCCATTACTACGACATCCTGGAAC
TGCCCTACCACGGGGACACCCTCAGCATGTTCAATGCTGCCCTTATGAAAAAGAGGTGCCTCTCTCTGC
CCTCACCAACATTCTGAGTGCCAGCTCATCAGCCACTGGAAAGGCAACATGACCAGGCTGCCCGCCCTC
CTGGTTCTGCCAAGTTCTCCCTGGAGACTGAAGTCGACCTCAGGAAGCCCTAGAGAACCTGGGAATGA
CCGACATGTTGAGACAGTTTCAGGCTGACTTCAGGAGTCTTTCAGACCAAGAGCCTCTCCAGCTCGCGCA
GGCGCTGCAGAAAGTGAAGATCGAGGTGAACGAGAGTGGCACGGTGGCCCTCCTATCCACAGCTGTATA
GTCTCAGCCCGCATGGCCCCGAGGAGATCATCATGGACAGACCTTCTCTTTGTGGTCCGGCACAACC
CCACAGGAACAGTCTTTTCATGGGCCAAGTGAATGGAACCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC228311 representing NM_001165413
Red=Cloning site Green=Tags(s)

MQMSPAL TCLVLGLALVFGEGSAVHHPPSYVAQASKDRNVVFSYGVASVLAMLQLTTGGETQQQIQAA
 GFKIDDKGMAPALRHL YKELMGPWNKDEISTTDAIFVQRDLKL VQGFMPHFRLFRSTVKQVDFSEVERA
 RF IINDWVKTHTKGMISNLLGKGAVDQL TRLVL VNALYFNGQWKTPFPDSSTHRRLFHKSDGSTVSPMM
 AQTNKFNYTEFTTPDGHYYDILELPHYGDTLSMFIAAPYEKEVPLSALTNILSAQLISHWKGNMTRLPR
 LVLPKFSLETEVDLRKPLENLGMDMFRQFQADF TSLSDQEPLHVAQALQKVKIEVNESGTVASSSTAVI
 VSARMAPEEIIIMDRPFLFVVRHNPTGTVLFMGQVMEP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8056_d06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_001165413

ORF Size: 1161 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_001165413.2](#), [NP_001158885.1](#)

RefSeq ORF: 1163 bp

Locus ID: 5054

Cytogenetics: 7q22.1

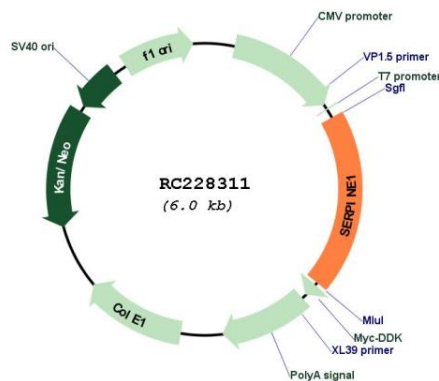
Protein Families: Druggable Genome, Secreted Protein

Protein Pathways: Complement and coagulation cascades, p53 signaling pathway

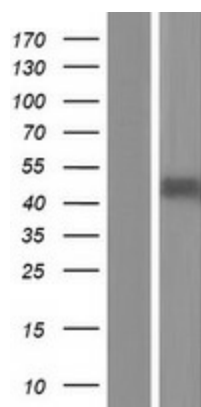
MW: 43.4 kDa

Gene 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]

Product images:



Circular map for RC228311



Western blot validation of overexpression lysate (Cat# [LY431339]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC228311 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).