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

Product datasheet for RC202085

PAI1 (SERPINE1) (NM_000602) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PAI1 (SERPINE1) (NM_000602) 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:

>RC202085 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCAGATGTCTCCAGCCCTCACCTGCCTAGTCCTGGGCCTGGCCCTTGTCTTTGGTGAAGGGTCTGCTG
TGCACCATCCCCCATCCTACGTGGCCCACCTGGCCTCAGACTTCGGGGTGAGGGTGTTTCAGCAGGTGGC
GCAGGCCTCCAAGGACCGCAACGTGGTTTTCTCACCCTATGGGGTGGCCTCGGTGTTGGCCATGCTCCAG
CTGACAACAGGAGGAGAAACCCAGCAGCAGATTCAAGCAGCTATGGGATTCAAGATTGATGACAAGGGCA
TGGCCCCCGCCCTCCGGCATCTGTACAAGGAGCTCATGGGGCCATGGAACAAGGATGAGATCAGCACCAC
AGACGCGATCTTCGTCCAGCGGGATCTGAAGCTGGTCCAGGGCTTCATGCCCCACTTCTTCAGGCTGTTC
CGGAGCACGGTCAAGCAAGTGGACTTTTCAGAGGTGGAGAGAGCCAGATTCATCATCAATGACTGGGTGA
AGACACACACAAAAGGTATGATCAGCAACTTGCTTGGGAAAGGAGCCGTGGACCAGCTGACACGGCTGGT
GCTGGTGAATGCCCTCTACTTCAACGGCCAGTGGAAGACTCCCTTCCCCGACTCCAGCACCCACCGCCGC
CTCTTCCACAAATCAGACGGCAGCACTGTCTCTGTGCCCATGATGGCTCAGACCAACAAGTTCAACTATA
CTGAGTTCACCACGCCCGATGGCCATTACTACGACATCCTGGAACTGCCCTACCACGGGGACACCCTCAG
CATGTTCATTGCTGCCCCTTATGAAAAAGAGGTGCCTCTCTCTGCCCTCACCAACATTCTGAGTGCCCAG
CTCATCAGCCACTGGAAAGGCAACATGACCAGGCTGCCCCGCCTCCTGGTTCTGCCCAAGTTCTCCCTGG
AGACTGAAGTCGACCTCAGGAAGCCCCTAGAGAACCTGGGAATGACCGACATGTTCAGACAGTTTCAGGC
TGACTTCACGAGTCTTTCAGACCAAGAGCCTCTCCACGTCGCGCAGGCGCTGCAGAAAGTGAAGATCGAG
GTGAACGAGAGTGGCACGGTGGCCTCCTCATCCACAGCTGTCATAGTCTCAGCCCGCATGGCCCCCGAGG
AGATCATCATGGACAGACCCTTCCTCTTTGTGGTCCGGCACAACCCCACAGGAACAGTCCTTTTCATGGG
CCAAGTGATGGAACCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>RC202085 protein sequence
Red=Cloning site Green=Tags(s)

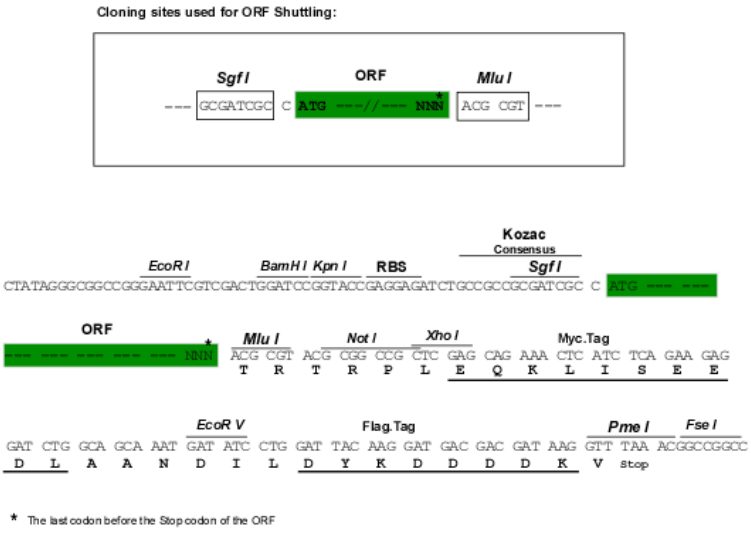
MQMSPALTCLVLGLALVFGEGSAVHHPPSYVAHLASDFGVRVFQQVAQASKDRNVVFSPYGVASVLAMLQ
LTTGGETQQQIQAAMGFKIDDKGMAPALRHLYKELMGPWNKDEISTTDAIFVQRDLKLVQGFMPHFFRLF
RSTVKQVDFSEVERARFIINDWVKTHTKGMISNLLGKGAVDQLTRLVLVNALYFNGQWKTPFPDSSTHRR
LFHKSDGSTVSVPMMAQTNKFNYTEFTTPDGHYYDILELPYHGDTLSMFIAAPYEKEVPLSALTNILSAQ
LISHWKGNMTRLPRLLVLPKFSLETEVDLRKPLENLGMTDMFRQFQADFTSLSDQEPLHVAQALQKVKIE
VNESGTVASSSTAVIVSARMAPEEIIMDRPFLFVVRHNPTGTVLFMGQVMEP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6147_h10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000602

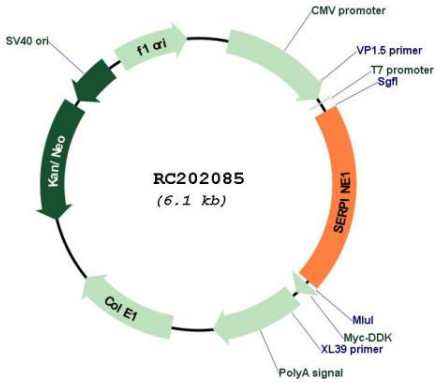
ORF Size: 1206 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

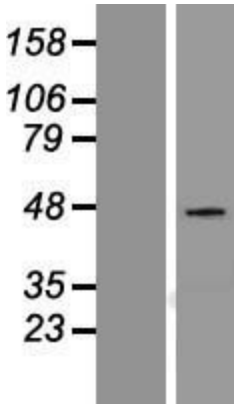
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_000602.5
RefSeq Size:	3207 bp
RefSeq ORF:	1209 bp
Locus ID:	5054
UniProt ID:	P05121
Cytogenetics:	7q22.1
Domains:	SERPIN
Protein Families:	Druggable Genome, Secreted Protein
Protein Pathways:	Complement and coagulation cascades, p53 signaling pathway
MW:	45.1 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 RC202085



Western blot validation of overexpression lysate (Cat# [LY424612]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202085 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

Coomassie blue staining of purified SERPINE1 protein (Cat# [TP302085]). The protein was produced from HEK293T cells transfected with SERPINE1 cDNA clone (Cat# RC202085) using MegaTran 2.0 (Cat# [TT210002]).