

Product datasheet for MR206361

Serpina5 (NM_172953) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Serpina5 (NM_172953) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Serpina5
Synonyms:	4933415L04; PAI-3; Pci
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR206361 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGGTTCTTCCCATTCTGTGCCTGGTGTGTTTCATCAGCCATGGGGTGGTCCCGCCGACTCCC
ATTCGAAGAAGAAGGCTAAAGAGTCCGCGGGTGTGTGGGACCTCCAGTAGCAAAGACTTTGC
TTTCAGACTCTACAGGGCCTTGGCTTCTGAATCCCCTGGTCTGAGTGTCTTCTTCCCCTTGGCGTG
TCTATGAGTTGGGCATGCTCTCCCTGGGGCTGGCTTGAAGACGAAGACCCAGATCCTAGATGGCCTAG
GCCTCAGCTCCAGCAAGGCCAAGAAGACAAGCTCCACAAGGGCTTCCAACAGCTGTACAGAGATTCAG
GCAGCCTAGTGATGGCCTGCAGCTGAGCCTGGGCAGTGCCTTTTTAAAGACCCAGCAGTACATATCCGG
GACGACTTCTGAGTGCCATGAAGACACTGTACATGTCAGACACTTTCTCTACCAACTTTGGGAACCTG
AAATTGCCAAGAAGCAGATCAACAACATATGTAGCCAAGCAGACCAAGGGCAAGATTGTAGACTTGATCAA
GGATCTTGACAGCACCCATGTCATGATAGTGGTAAATTACATCTTCTTCAAAGCCAAGTGGCAGACGGCC
TTCAGTGAGACAAACACCCACAAGATGGATTTCCATGTGACCCCAAAAAGACCATACGGGTGCCATGA
TGAACCGTGAAGATGAGTATTCTACTACCTGGACCAAAACATCTCCTGCACGGTGGTGGGGATCCCTTA
TCAAGGCAATGCCATTGCTCTATTTATTCTCCCAAGGCAAGATGAAGCAGGTGGAGGATGGCCTG
GACGAGAGAACATTGAGGAAGTGGCTTAAAGATGTTTCAACAAGAGACGCTTAGATCTTACCTCCCAAGT
TCTCCATTGAGGCTACCTACAAACTGGAAAATGTCTCCCAAGCTGGGCATCCAGGACGCTTCCACCAC
CCATGCTGACTTGTCTGGCATTACTGACCATACCAATATCAAGTTGTCTGAGATGGTGCACAAATCCATG
ATGGAGTTGAAGAGTCAGGAACCAAGCAGCTGCCATCACAGGAGCCATCTTACATTCAGATCTGCTC
GGCCGAGCTCCCTGAAGATAGAATTCACCAGACCCCTTCTGCTGACCCTTATGGAGGATTCACATATACT
TTTCGTTGGCAAGGTGACCCGGCCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >MR206361 protein sequence
 Red=Cloning site Green=Tags(s)

MRFFPILCLVLFISHGVASRRHSHSKKKKAKESSVAVGPPSSKDFAFRLYRALASESPGQNVFFSPLSV
 SMSLGLMSL GAGLKTKTQILDGLGLSLQQGEDKLHKGFQQLQRFRQPSDGLQLSLGSALFKDPAVHIR
 DDFLSAMKTL YMSDTFSTNFGNPEIAKKQINNYVAKQTKGKIVDLIKDL DSTHVMIVVNYIFFKAKWQTA
 FSETNTHKMD FHVTPKKTIRVPMNREDEYSYLDQNI SCTVVGIPYQGN AIALFILPSEGKMKQVEDGL
 DERTLRNWLK MFTKRRLDLYLPKFSIEATYKLENVLPKLG IQDVF TTHADLSGITDHTNIKLSMVHKSM
 MEVEESGTTAAAITG AIFTFRSARPS SLKIEFTRPFL LTMEDSHILFVGKVTRP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfi-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_172953

ORF Size: 1218 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_172953.1](#), [NM_172953.2](#), [NM_172953.3](#), [NP_766541.1](#), [NP_766541.2](#)

RefSeq Size: 2162 bp

RefSeq ORF: 1218 bp

Locus ID: 268591

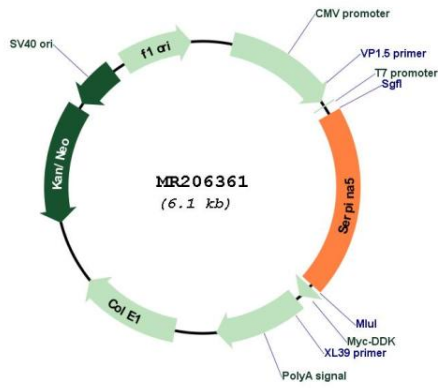
UniProt ID: [P70458](#)

Cytogenetics: 12 E

MW: 45.6 kDa

Gene Summary: Heparin-dependent serine protease inhibitor acting in body fluids and secretions. Inactivates serine proteases by binding irreversibly to their serine activation site. Involved in the regulation of intravascular and extravascular proteolytic activities. Plays hemostatic roles in the blood plasma. Acts as a procoagulant and proinflammatory factor by inhibiting the anticoagulant activated protein C factor as well as the generation of activated protein C factor by the thrombin/thrombomodulin complex. Acts as an anticoagulant factor by inhibiting blood coagulation factors like prothrombin, factor XI, factor Xa, plasma kallikrein and fibrinolytic enzymes such as tissue- and urinary-type plasminogen activators. In seminal plasma, inactivates several serine proteases implicated in the reproductive system. Inhibits the serpin acrosin; indirectly protects component of the male genital tract from being degraded by excessive released acrosin. Inhibits tissue- and urinary-type plasminogen activator, prostate-specific antigen and kallikrein activities; has a control on the sperm motility and fertilization. Inhibits the activated protein C-catalyzed degradation of SEMG1 and SEMG2; regulates the degradation of semenogelin during the process of transfer of spermatozoa from the male reproductive tract into the female tract. In urine, inhibits urinary-type plasminogen activator and kallikrein activities. Inactivates membrane-anchored serine proteases activities such as MPRSS7 and TMPRSS11E. Inhibits urinary-type plasminogen activator-dependent tumor cell invasion and metastasis. May also play a non-inhibitory role in seminal plasma and urine as a hydrophobic hormone carrier by its binding to retinoic acid (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR206361