

## Product datasheet for RC202138

### SERPINB1 (NM\_030666) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SERPINB1 (NM_030666) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SERPINB1
Synonyms:	EI; ELANH2; HEL-S-27; HEL57; LEI; M/NEI; MNEI; PI-2; PI2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC202138 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAGCAGCTGAGCTCAGCAAACCCGCTTCGCCTTGGACCTGTTCTGGCGTTGAGTGAGAACAATC  
CGGCTGGAACATCTTCATCTCTCCCTCAGCATTTTCATCTGCTATGGCCATGGTTTTCTGGGGACCAG  
AGGTAACACGGCAGCACAGCTGTCCAAGACTTCCATTTCAACACGGTTGAAGAGGTTCAATCAAGATTC  
CAGAGTCTGAATGCTGATATCAACAAACGTGGAGCGTCTTATATTCTGAAACTTGCTAATAGATTATATG  
GAGAGAAAACTTACAATTCCTTCTGAGTTCCTGGTTTCGACTCAGAAAACATATGGTGTGACCTGGC  
CAGTGTGGATTTTCAGCATGCCTCTGAAGATGCAAGGAAGACCATAAACCAGTGGGTCAAAGGACAGACA  
GAAGGAAAAATCCGGAACCTGTTGGCTTCGGGCATGGTTGATAACATGACCAAACCTGTGCTAGTAAATG  
CCATCTATTTCAAGGGAACTGGAAGGATAAATTCATGAAAGAAGCCACGACGAATGCACCATTAGATT  
GAATAAGAAAGACAGAAAACTGTGAAAATGATGTATCAGAAGAAAAATTTGCATATGGCTACATCGAG  
GACCTTAAGTGCCGTGTGCTGGAACCTTACCAAGGCGAGGAGCTCAGCATGGTCATCCTGCTGCCGG  
ATGACATTGAGGACGAGTCCACGGGCTGAAGAAGATTGAGGAACAGTTGACTTTGAAAAAGTTGCATGA  
GTGGACTAAACCTGAGAATCTCGATTTTCATTGAAGTTAATGTCAGCTTCCCAGGTTCAAACCTGGAAGAG  
AGTTACACTCTCAACTCCGACCTCGCCCGCCTAGGTGTGCAGGATCTTTAACAGTAGCAAGGCTGATG  
TGCTGGCATGTGAGGAGCCAGAGATATTTTATATCAAAAATTGTCACAAGTCATTTGTGGAAGTGAA  
TGAAGAGGGAACAGAGGGCGCAGCTGCCACAGCAGGCATCGCAACTTTCTGCATGTTGATGCCCGAAGAA  
AATTTCACTGCCGACCATCCATTCCTTTCTTTATTCGGCATAATTCCTCAGGTAGCATCTATTCTTGG  
GGAGATTTCTTCCCCT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC202138 protein sequence  
 Red=Cloning site Green=Tags(s)

MEQLSSANTRFALDLFLALSENNPAGNIFISPFSSAMAMVFLGTRGNTAAQLSKTFHFNTVEEVHSRF  
 QSLNADINKRGASYILKLANRLYGEKTYNFLPEFLVSTQKTYGADLASVDFQHASEDARKTINQWVKGQT  
 EGKIPPELLASGMVDNMTKLVLVNAIYFKGNWKDKFMKEATTNAPFRLNKKDRKTVKMMYQKKKFAYGYIE  
 DLKCRVLELPYQGEELSMVILLPDDIEDESTGLKKIEEQLTLEKLHEWTKPENLDFIEVNVSLPRFKLEE  
 SYTLNSDLARLGVQDLFNSSKADLSGMSGARDIFISKIVHKSFVEVNEEGTEAAAATAGIATFCMLMPEE  
 NFTADHPFLFFIRHNSSGSILFLGRFSSP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6541\\_c04.zip](https://cdn.origene.com/chromatograms/mk6541_c04.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_030666

**ORF Size:** 1137 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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_030666.4](#)

**RefSeq Size:** 2678 bp

**RefSeq ORF:** 1140 bp

**Locus ID:** 1992

**UniProt ID:** [P30740](#)

**Cytogenetics:** 6p25.2

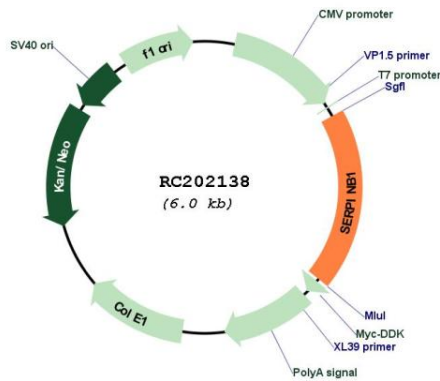
**Domains:** SERPIN

**Protein Families:** Druggable Genome

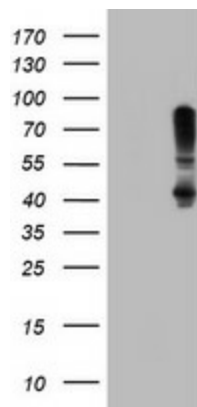
**MW:** 42.7 kDa

**Gene Summary:** The protein encoded by this gene is a member of the serpin family of proteinase inhibitors. Members of this family maintain homeostasis by neutralizing overexpressed proteinase activity through their function as suicide substrates. This protein inhibits the neutrophil-derived proteinases neutrophil elastase, cathepsin G, and proteinase-3 and thus protects tissues from damage at inflammatory sites. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2012]

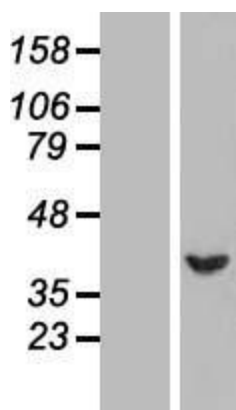
Product images:



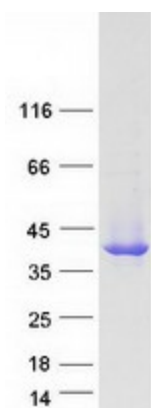
Circular map for RC202138



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY SERPINB1 (Cat# RC202138, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-SERPINB1(Cat# [TA800093]). Positive lysates [LY410744] (100ug) and [LC410744] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY410744]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202138 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SERPINB1 protein (Cat# [TP302138]). The protein was produced from HEK293T cells transfected with SERPINB1 cDNA clone (Cat# RC202138) using MegaTran 2.0 (Cat# [TT210002]).