

## Product datasheet for RC211032

### SERPINB13 (NM\_012397) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SERPINB13 (NM_012397) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SERPINB13
Synonyms:	headpin; HSHUR7SEQ; HUR7; PI13
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC211032 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGATCACTTGGCGCCGTCAGCACTCGACTTGGGTTTGATCTTTCAAAGAGCTGAAGAAAACAATG  
ATGGCAACATCTCTTTCCCTGTGGGCATCTGACTGCAATTGGCATGGTCTCTGGGGACCCGAGG  
AGCCACCGCTTCCAGTTGGAGGAGGTGTTTCACTCTGAAAAGAGACGAAGAGCTCAAGAATAAAGGCT  
GAAGAAAAGAGGTGATTGAGAACACAGAAGCAGTACATCAACAATCCAAAAGTTTTGACTGAAATAA  
GCAAACTACTAATGATTATGAACTGAACATAACCAACAGGCTGTTTGGAGAAAAACATACCTCTTCT  
TCAAAAATACTTAGATTAGTTGAAAAATATTATCATGCATCTCTGGAACCTGTTGATTTGTAAATGCA  
GCCGATGAAAGTCGAAAGAAGATTAATTCCTGGGTTGAAAGCAAAAACAATGAAAAATCAAGGACTTGT  
TCCCAGATGGCTCTATTAGTAGCTTACCAAGCTGGTGCTGGTGAACATGGTTTATTTAAAGGGCAATG  
GGACAGGGAGTTAAGAAAGAAAATACTAAGGAAGAGAAATTTGGATGAATAAGAGCACAAGTAAATCT  
GTACAGATGATGACACAGAGCCATTCTTTAGCTTCACTTCTGGAGGACTTGCAGGCCAAAATCTAG  
GGATCCATATAAAAACAACGACCTAAGCATGTTTGTGCTTCTGCCAACGACATCGATGGCCTGGAGAA  
GATAATAGATAAAAATAAGTCTGAGAAATGGTAGAGTGGACTAGTCCAGGCATATGGAAGAAAGAAAG  
GTGAATCTGACTTCCCGGTTTGGAGTGGAGGACGGTTACGATCTAGAGGCGTCTGGCTGCCATGG  
GGATGGGCGATGCCTTCAGTGAGCACAAGCCGACTACTCGGGAATGTCGTGAGGCTCCGGGTTGTACGC  
CCAGAAGTTCCTGCACAGTTCCTTTGTGCGAGTAACTGAGGAAGGCACCGAGGCTGCAGCTGCCACCGGC  
ATAGGCTTTACTGTCACATCCGCCCCAGGTCATGAAAATGTTCACTGCAATCATCCCTTCTGTTCTTCA  
TCAGGCACAATGAATCCAACAGCATCTCTTCTCGGCAGATTTTCTTCTCT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC211032 protein sequence  
Red=Cloning site Green=Tags(s)

MDSLGAVSTRLGFDL FKELKKTNDGNIFFSPVGILTAIGMVLLGTRGATASQLEEVFHSEKETKSSRIKA  
 EEKEVIENTEAVHQFQKFLTEISKLTNDYELNITNRLFGEKTYLFLQKYLDYVEKYYHASLEPVDVNA  
 ADESRRKINSWVESKTNEKIKDLFPDGSISSTKLVLVNMVYFKGQWDREFKKEEKFWMNKSTSKS  
 VQMMTQSHSFSFTFLEDLQAKILGIPYKNNDLSMFVLLPNDIDGLEKIIDKISPEKLVEWTSFGHMEERK  
 VNLHLPRFEVEDGYDLEAVLAAMGMGDAFSEHKADYSGMSSGSLYAQKFLHSSFVAVTEEGTEAAAATG  
 IGFTVTSAPGHENVHCNHPFLFFIRHNESNSILFFGRFSSP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6372\\_f03.zip](https://cdn.origene.com/chromatograms/mk6372_f03.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_012397

**ORF Size:** 1173 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\\_012397.4](#)

**RefSeq Size:** 3197 bp

**RefSeq ORF:** 1176 bp

**Locus ID:** 5275

**UniProt ID:** [Q9UIV8](#)

**Cytogenetics:** 18q21.33

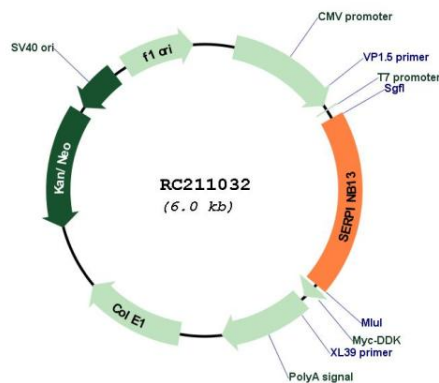
**Domains:** SERPIN

**Protein Families:** Druggable Genome, Transmembrane

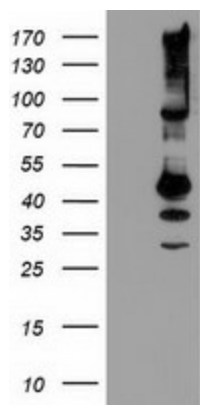
**MW:** 44.3 kDa

**Gene Summary:** The protein encoded by this gene is a member of the serpin family of serine protease inhibitors. The encoded protein inhibits the activity of cathepsin K and is itself transcriptionally repressed by RUNX1. This gene is downregulated in many types of cancer. [provided by RefSeq, Jan 2017]

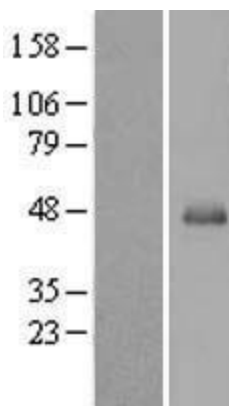
### Product images:



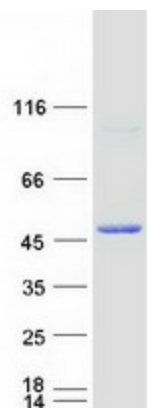
Circular map for RC211032



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY SERPINB13 (Cat# RC211032, 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-SERPINB13 (Cat# [TA503672]). Positive lysates [LY415794] (100ug) and [LC415794] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY415794]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211032 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SERPINB13 protein (Cat# [TP311032]). The protein was produced from HEK293T cells transfected with SERPINB13 cDNA clone (Cat# RC211032) using MegaTran 2.0 (Cat# [TT210002]).