

## Product datasheet for RC215702

### Signal Peptide Peptidase (HM13) (NM\_178580) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Signal Peptide Peptidase (HM13) (NM_178580) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Signal Peptide Peptidase
Synonyms:	H13; IMP1; IMPAS; IMPAS-1; MSTP086; PSENL3; PSL3; SPP; SPPL1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC215702 representing NM_178580 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGACTCGGCCCTCAGCGATCCGCATAACGGCAGTGCCGAGGCAGGCGGCCACCAACAGCACTACGC  
GGCCGCTTCCACGCCGAGGGCATCGCGCTGGCTACGGCAGCCTCTGCTCATGGCGTGTGCCAT  
CTTCTTCGGCGCCCTGCGCTCCGTACGCTGCGCCCGGCAAGAATGCTCAGACATGCCTGAAACAATC  
ACCAGCCGGGATGCCGCCGCTTCCCATCATCGCCAGCTGCACACTCTGGGGCTCTACCTCTTTTTCA  
AAATATTCTCCCAGGAGTACATCAACCTCCTGCTGTCCATGTATTCTTCGTGCTGGGAATCCTGGCCCT  
GTCCACACCATCAGCCCTTATGAATAAGTTTTTCCAGCCAGCTTCCAAATCGACAGTACCAGCTG  
CTCTTACACAGGGTTCTGGGAAAACAAGGAAGAGATCATCAATTATGAATTTGACACCAAGGACCTGG  
TGTGCCTGGCCCTGAGCAGCATCGTTGGCGTCTGGTACCTGCTGAGGAAGCACTGGATTGCCAACACCT  
TTTTGGCTGGCCTTCTCCCTTAATGGAGTAGAGCTCCTGCACCTCAACAATGTCAGCACTGGCTGCATC  
CTGCTGGGCGGACTTTCATCTACGATGTCTTCTGGGTATTTGGCACCAATGTGATGGTGACAGTGGCCA  
AGTCCCTCGAGGCACCAATAAAATTGGTGTTCGCCAGGATCTGCTGGAGAAAGGCTCGAAGCAAAACA  
CTTTGCCATGCTGGGACTTGGAGATGTCGTTCATCCAGGATCTTCATTGCCCTTGGCTGCTGCGCTTTGAC  
ATCAGCTTGAAGAAGAATACCCACACTACTTCTACACCAGCTTTCAGCCTACATCTTCGGCCTGGGCC  
TTACCATCTTCATCATGCACATCTCAAGCATGCTCAGCCTGCCCTCTATACCTGGTCCCGCCTGCAT  
CGGTTTTCTGTCTGCTGGTGGCGCTGGCCAAGGGAGAAGTGACAGAGATGTTACAGTACGAGTCTCGGCCG  
GAAATCTGCCTCATACCCGAGGCTCACCCACTTCCCACAGTCTCGGGCTCCCGAGCCAGCCTGGCCG  
ACTCCATGCAGCAGAAGCTAGCTGGCCCTCGCCCGCGGCCCGCAGAATCCCAGCGCCATG

**ACGGT**ACGGCGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

**Protein Sequence:** >RC215702 representing NM\_178580  
Red=Cloning site Green=Tags(s)

MDSALSDPHNGSAEAGGPTNSTTRPPSTPEGIALAYGSLLLMALLPIFFGALRSVRCARGKNASDMPETI  
 TSRDAARFPPIASCTLLGLYLFFKIFSQEYINLLL SMYFFVLGILALSHITISPFMKNKFFPASFPNRQYQL  
 LFTQSGGENKEEII NYEFDTKDLVCLGLSSIVGVWYLLRKHWIANNLFGLAFSLNGVELLHLNNVSTGCI  
 LLGGLFIYDVFWVFGTNVMVTVAKSFEAPIKLVFPQDLLLEKLEANNFAMGLGDVVIPGIFIALLLRFD  
 ISLKKNTHTYFYTSFAAYIFGLGLTIFIMHIFKHAQPALLYLVPACIGFPVLVALAKGEVTEMFSYESSA  
 EILPHTPRLTHFPTVSGSPASLADSMQQLAGPRRRRPQNPSAM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8056\\_h05.zip](https://cdn.origene.com/chromatograms/mk8056_h05.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



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

**ACCN:** NM\_178580

**ORF Size:** 1182 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\\_178580.2](#), [NP\\_848695.1](#)

**RefSeq Size:** 1807 bp

**RefSeq ORF:** 1185 bp

**Locus ID:** 81502

**UniProt ID:** [Q8TCT9](#)

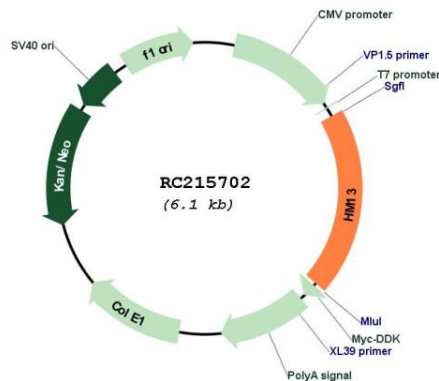
**Cytogenetics:** 20q11.21

**Protein Families:** Protease, Transmembrane

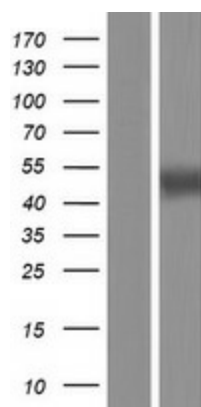
**MW:** 43.2 kDa

**Gene Summary:** The protein encoded by this gene, which localizes to the endoplasmic reticulum, catalyzes intramembrane proteolysis of some signal peptides after they have been cleaved from a preprotein. This activity is required to generate signal sequence-derived human lymphocyte antigen-E epitopes that are recognized by the immune system, and to process hepatitis C virus core protein. The encoded protein is an integral membrane protein with sequence motifs characteristic of the presenilin-type aspartic proteases. Multiple transcript variants encoding several different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

### Product images:



Circular map for RC215702



Western blot validation of overexpression lysate (Cat# [LY405876]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215702 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).