

## Product datasheet for **RG217253**

### Signal Peptide Peptidase (HM13) (NM\_178581) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Signal Peptide Peptidase (HM13) (NM_178581) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Signal Peptide Peptidase
Synonyms:	H13; IMP1; IMPAS; IMPAS-1; MSTP086; PSENL3; PSL3; SPP; SPPL1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG217253 representing NM_178581 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGACTCGGCCCTCAGCGATCCGCATAACGGCAGTGCCGAGGCAGGCGGCCACCAACAGCACTACGC  
GGCCGCTTCCACGCCGAGGGCATCGCGCTGGCCTACGGCAGCCTCTGCTCATGGCGTGCTGCCAT  
CTTCTTCGGCGCCCTGCGCTCCGTACGCTGCGCCCGGCAAGAATGCTTACGACATGCCTGAAACAATC  
ACCAGCCGGGATGCCGCCGCTTCCCATCATCGCCAGCTGCACACTCTGGGGCTCTACCTCTTTTTCA  
AAATATTCTCCCAGGAGTACATCAACCTCCTGCTGCCATGTATTCTTCGTGCTGGGAATCCTGGCCCT  
GTCCACACCATCAGCCCTTATGAATAAGTTTTTCCAGCCAGCTTCCAAATCGACAGTACCAGCTG  
CTTTCACACAGGGTTCTGGGAAAACAAGGAAGAGATCATCAATTATGAATTTGACACCAAGGACCTGG  
TGTGCCTGGCCCTGAGCAGCATCGTTGGCGTCTGGTACCTGCTGAGGAAGCACTGGATTGCCAACACCT  
TTTTGGCTGGCCTTCTCCCTTAATGGAGTAGAGCTCCTGCACCTCAACAATGTCAGCACTGGCTGCATC  
CTGCTGGGCGGACTTTCATCTACGATGCTTCTGGGTATTTGGCACCAATGTGATGGTACAGTGGCCA  
AGTCCCTCGAGGCACCAATAAAATTGGTGTTCGCCAGGATCTGCTGGAGAAAGGCTCGAAGCAAAACA  
CTTTGCCATGCTGGGACTTGGAGATGTCGTCATTCCAGGGATCTTCATTGCCCTTGGCTGCTGCGCTTTGAC  
ATCAGCTTGAAGAAGAATACCCACACTACTTCTACACCAGCTTTGCAGCCTACATCTTCGGCCTGGGCC  
TTACCATCTTCATCATGCACATCTCAAGCATGCTCAGCCTGCCCTCTATACCTGGTCCCGCCTGTCAT  
CGGTTTTCTGTCTGCTGGTGGCGCTGGCCAAGGGAGAAGTGACAGAGATGTTACAGTACGAGTCTCGGCCG  
GAAATCTGCCTCATACCCCGAGGCTCACCCACTTCCCCACAGTCTCGGGCTCCCGAGCCAGCCTGGCCG  
ACTCCATGCAGCAGAAGCTAGCTGGCCCTCGCCGCGGCGCCGCGAGAATCCAGCGCCATTTATGAGGA  
GTCAAATCCTAAGGATCCAGCGCAGTGACAGAATCCAAAGAGGGAACAGAGGCATCAGCATCGAAGGGG  
CTGGAGAAGAAAGAGAAA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

**Protein Sequence:** >RG217253 representing NM\_178581  
 Red=Cloning site Green=Tags(s)

MDSALSDPHNGSAEAGGPTNSTTRPPSTPEGIALAYGSLLLMALLPIFFGALRSVRCARGKNASDMPETI  
 TSRDAARFPPIASCTLLGLYLFFKIFSQEYINLLL SMYFFVLGILALSHITISPFMNKFFPASFPNRQYQL  
 LFTQGSNGENKEEII NYEFDTKDLVCLGLSSIVGVWYLLRKHWIANNLFGALFSLNGVELLHLNNVSTGCI  
 LLGGLFIYDVFWVFGTNVMVTVAKSFEAPIKLVFPQDLLEKGLEANNFAMGLGDVVIPGIFIALLLRFD  
 ISLKKNHTHYFYTSFAAYIFGLGLTIFIMHIFKHAQPALLYLPACIGFPVLVALAKGEVTEMFSYESSA  
 EILPHTPRLTHFPTVSGSPASLADSMQQLAGPRRRRPQNPSAIYEEENPKDPAAVTESKEGTEASASKG  
 LEKKEK

TRTRPLE - GFP Tag - V

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_178581

**ORF Size:** 1278 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\\_178581.3](#)

**RefSeq Size:** 1751 bp

**RefSeq ORF:** 1281 bp

**Locus ID:** 81502

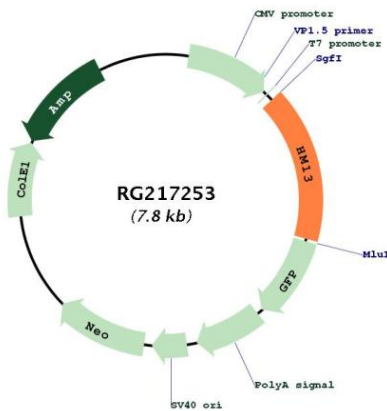
**UniProt ID:** [Q8TCT9](#)

**Cytogenetics:** 20q11.21

**Protein Families:** Protease, Transmembrane

**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 RG217253