

Product datasheet for **RC217253**

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:	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)



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ORF Nucleotide Sequence:

>RC217253 representing NM_178581
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGACTCGGCCCTCAGCGATCCGCATAACGGCAGTGCCGAGGCAGGCGGCCACCAACAGCACTACGC
 GGCCGCCTTCCACGCCGAGGGCATCGCGCTGGCCTACGGCAGCCTCCTGCTCATGGCGCTGCTGCCCAT
 CTTCTTCGGCGCCCTGCGCTCCGTACGCTGCGCCCGCGCAAGAATGCTTCAGACATGCCTGAAACAATC
 ACCAGCCGGGATGCCGCCGCTTCCCCATCATCGCCAGCTGCACACTCTTGGGGCTCTACCTCTTTTTCA
 AAATATTCTCCCAGGAGTACATCAACCTCCTGCTGTCCATGTATTTCTTCGTGCTGGAACTCTGGCCCT
 GTCCACACCATCAGCCCTTATGAATAAGTTTTTCCAGCCAGCTTCCAAATCGACAGTACCAGCTG
 CTCTTCACACAGGTTCTGGGAAAACAAGGAAGAGATCATCAATTATGAATTTGACACCAAGGACCTGG
 TGTGCCTGGGCTGAGCAGCATCGTTGGCGTCTGGTACCTGCTGAGGAAGCACTGGATTGCCAACAACT
 TTTTGGCCTGGCCTTCTCCCTTAATGGAGTAGAGCTCCTGCACCTCAACAATGTCAGCACTGGCTGCATC
 CTGCTGGCGGACTCTTATCTACGATGTCTTCTGGGTATTTGGCACCAATGTGATGGTGACAGTGGCCA
 AGTCTTCGAGGCACCAATAAAATTGGTGTTCCTCCAGGATCTGCTGGAGAAAGGCTCGAAGCAACAA
 CTTTGCCATGCTGGGACTTGAGATGTCGTCTATTCCAGGGATCTTATTGCCTTGTGCTGCGCTTTGAC
 ATCAGCTTGAAGAAGAATACCCACACCTACTTCTACACCAGCTTTCAGCCTACATCTTCGGCCTGGGCC
 TTACCATCTTATCATGCACATCTCAAGCATGCTCAGCCTGCCCTCCTATACCTGGTCCCCGCCTGCAT
 CGGTTTTCTGTCTGCTGGTGGCGCTGGCCAAGGGAGAAGTGACAGAGATGTTACAGTACGAGTCTCGGGC
 GAAATCCTGCCTCATACCCGAGGCTCACCCACTTCCCCACAGTCTCGGGCTCCCCAGCCAGCCTGGCCG
 ACTCCATGCAGCAGAAGCTAGCTGGCCCTCGCCGCGCGCCGAGAATCCCAGCGCCATTTATGAGGA
 GTCAAATCCTAAGGATCCAGCGGAGTACAGAATCCAAGAGGGAACAGAGGCATCAGCATCGAAGGGG
 CTGGAGAAGAAAGAGAAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC217253 representing NM_178581
 Red=Cloning site Green=Tags(s)

MDSALSDPHNGSAEAGGPTNSTTRPPSTPEGIALAYGSLLLMALLPIFFGALRSVRCARGKNASDMPETI
 TSRDAARFPIIASCTLLGLYLFFKIFSQEYINLLL SMYFFVLGILALSHITSPFMNKFPPASFPNRQYQL
 LFTQSGENKEEII NYEFDTKDLVCLGLSSIVGVWYLLRKHVIANNL FGLAFSLNGVELLHLNNVSTGCI
 LLGGLFIYDVFVWFGTNVMVTVAKSFEAPIKLVFPQDLLEKGLEANNFAMLGLGDVVIPGIFIALLLRFD
 ISLKNHTHYFYTSFAAYIFGLGLTIFIMHIFKHAQPALLYLVPACIGFPVLVALAKGEVTEMFSYESSA
 EILPHTPRLTHFPTVSGSPASLADSMQQKLAGPRRRRPQNP SAIYEE SNPKDPAAVTESKEGTEASASKG
 LEKKEK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6075_c01.zip

Restriction Sites:

Sgfl-Mlul

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](#)

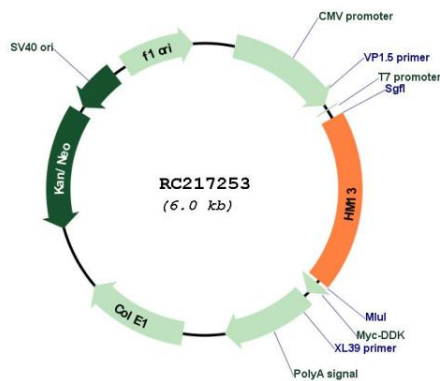
Cytogenetics: 20q11.21

Protein Families: Protease, Transmembrane

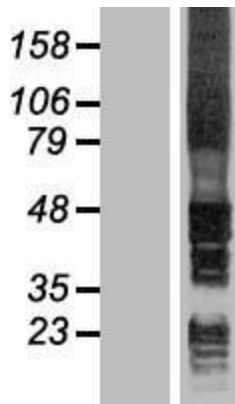
MW: 46.6 kDa

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 RC217253



Western blot validation of overexpression lysate (Cat# [LY403610]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217253 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).