

## Product datasheet for RC217811

### HERPUD1 (NM\_001010990) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	HERPUD1 (NM_001010990) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HERPUD1
Synonyms:	HERP; Mif1; SUP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC217811 representing NM_001010990 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAGTCCGAGACCGAACCCGAGCCCGTCACGCTCCTGGTGAAGAGCCCCAACCCAGCGCCACCGCGACT  
TGGAGCTGAGTGGCGACCGCGGCTGGAGTGTGGGCCACCTCAAGGCCACCTGAGCCGCTACCCCGA  
GCGTCCGCGTCCAGAGGACCAGAGGTTAATTTATTCTGGGAAGCTGTTGTTGGATACCAATGTCTCAGG  
GACTTGCTTCAAAGGTGGCTGAATCCACAGAGGAGCCTGCTGGTTCTAATCGGGACAGTATCCTGAGG  
ATTCCTCAAGTGATGGTTAAGGCAAAGGGAAGTCTTCGGAACCTTTCTCCCTGGATGGAAAACAT  
CTCAAGGCCTGAAGCTGCCAGCAGGCATTCCAAGGCCTGGGTCCTGGTTTCTCCGTTACACACCCAT  
GGTGGCTTCAGCTTTCTGTTCCAGCAGATATATGCACGACAGTACTACATGCAATATTTAGCAGCCA  
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AGCCCCTATTCACAACCAGTTTCCAGCTGAAAACCAGCCTGCCAATCAGAATGCTGCTCCTCAAGTGGTT  
GTTAATCCTGGAGCCAATCAAAATTTGCGGATGAATGCACAAGGTGGCCCTATTGTGAAGAAGATGATG  
AAATAATCGAGATTGGTTGGATTGGACCTATTCAGCAGCTACATTTTCTGTTTTCTCAGTATCCTCTA  
CTTCTACTCCTCCCTGAGCAGATTCTCATGGTTCATGGGGCCACCGTTGTTATGTACCTGCATCACGTT  
GGTGGTTTTCCATTTAGACCGAGCGGTTCCAGAACTTCCAAATGATGGTCTCCTCCTGACGTTGTAA  
ATCAGGACCCCAACAATAACTTACAGGAAGGCACTGATCCTGAAACTGAAGACCCCAACCCTCCCTCC  
AGACAGGGATGTACTAGATGGCGAGCAGACCAGCCCTCCTTTATGAGCAGCATGGCTTGTCTTCAAG  
ACTTTCTTGCCTCTCTTCTTCCAGAAGGCCCCCCAGCCATCGAAAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTAA



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**Protein Sequence:** >RC217811 representing NM\_001010990  
Red=Cloning site Green=Tags(s)

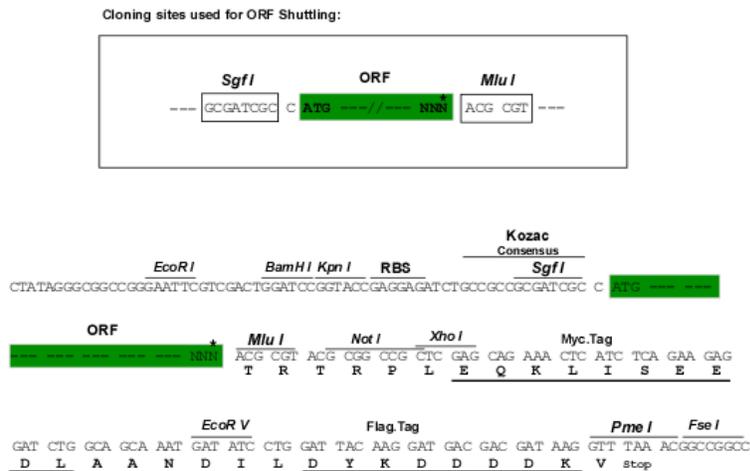
MESETEPEPVTLVVKSPNQRRDLELSGDRGWSVGHKKAHLRVYPERPRPEDQRLIYSGKLLLDHQCLR  
 DLLPKVAESTEEPAGSNRGQYPEDSSSDGLRQREVLNLSPPGWENISRPEAAQQAQGLGPGFSGYTPY  
 GWLQLSWFQQIYARQYYMQYLAATAASGAFVPPPSAQEIPVVSAPAPAPIHNQFPAENQAPANQAAPQVV  
 VNPGANQRLRMNAQGGPIVEEDDEINRDWLDWTYSAATFSVFLSILYFYSSLSRFLMVMGATVVMYLHHV  
 GWFPFRPRPVQNFNDGPPPPDVVNQDPNNNLQEGTDPETEDPNHLPPDRDVLGDGEQTSFSFMSTAWLVFK  
 TFFASLLPEGPPAIAN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8055\\_b01.zip](https://cdn.origene.com/chromatograms/mk8055_b01.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



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

**ACCN:** NM\_001010990

**ORF Size:** 1098 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\\_001010990.1](#), [NP\\_001010990.1](#)

**RefSeq Size:** 2123 bp

**RefSeq ORF:** 1100 bp

**Locus ID:** 9709

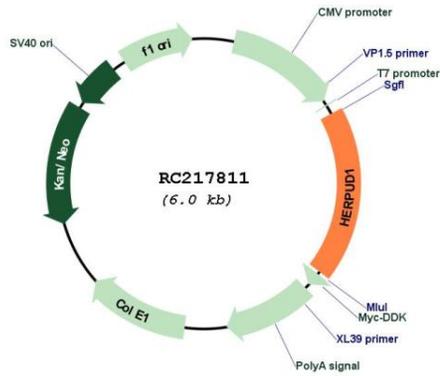
**Cytogenetics:** 16q13

**Protein Families:** Druggable Genome

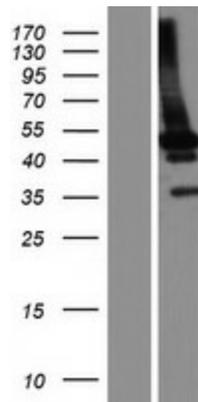
**MW:** 40.7 kDa

**Gene Summary:** The accumulation of unfolded proteins in the endoplasmic reticulum (ER) triggers the ER stress response. This response includes the inhibition of translation to prevent further accumulation of unfolded proteins, the increased expression of proteins involved in polypeptide folding, known as the unfolded protein response (UPR), and the destruction of misfolded proteins by the ER-associated protein degradation (ERAD) system. This gene may play a role in both UPR and ERAD. Its expression is induced by UPR and it has an ER stress response element in its promoter region while the encoded protein has an N-terminal ubiquitin-like domain which may interact with the ERAD system. This protein has been shown to interact with presenilin proteins and to increase the level of amyloid-beta protein following its overexpression. Alternative splicing of this gene produces multiple transcript variants encoding different isoforms. The full-length nature of all transcript variants has not been determined. [provided by RefSeq, Jan 2013]

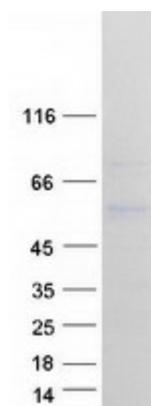
Product images:



Circular map for RC217811



Western blot validation of overexpression lysate (Cat# [LY423261]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217811 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HERPUD1 protein (Cat# [TP317811]). The protein was produced from HEK293T cells transfected with HERPUD1 cDNA clone (Cat# RC217811) using MegaTran 2.0 (Cat# [TT210002]).