

Product datasheet for RC200693

HERPUD1 (NM_001010989) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HERPUD1 (NM_001010989) 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:	>RC200693 representing NM_001010989 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGAGTCCGAGACCGAACCCGAGCCCGTCACGCTCCTGGTGAAGAGCCCCAACCCAGCGCCACCGCGACT
TGGAGCTGAGTGGCGACCGCGGCTGGAGTGTGGGCCACCTCAAGGCCACCTGAGCCGCTACCCCGA
GCGTCCGCGTCCAGAGGACCAGAGGTTAATTTATTCTGGGAAGCTGTTGTTGGATACCAATGTCTCAGG
GACTTGCTTCAAAGCAGGAAAAACGGCATGTTTTGCATCTGGTGTGCAATGTGAAGAGTCTTCAAAAA
TGCCAGAAATCAACGCCAAGGTGGCTGAATCCACAGAGGAGCCTGCTGGTTCTAATCGGGGACAGTATCC
TGAGGATTCCTCAAGTGATGGTTTAAGGCAAAGGGAAGTTCCTCGGAACCTTTCTCCCTGGATGGAA
AACATCTCAAGGCCTGAAGCTGCCAGCAGGCATTCCAAGGCCTGGGTCCTGGTTTCTCCGTTACACAC
CCTATGGGTGGCTTCAGCTTTCTGGTCCAGCAGATATATGCACGACAGTACTACATGCAATATTTAGC
AGCCACTGCTGCATCAGGGGCTTTTGTCCACCACCAAGTGCACAAGAGATACCTGTGGTCTCTGCACCT
GCTCCAGCCCCTATTCACAACAGTTTCCAGCTGAAAACCCAGCCTGCCAATCAGAATGCTGCTCCTCAAG
TGGTTGTTAATCCTGGAGCCAATCAAAATTTGCGGATGAATGCACAAGGTGGCCCTATTGTGAAGAAGA
TGATGAAATAAATCGAGATTGGTTGGATTGGACATTCAGCAGCTACATTTTCTGTTTTCTCAGTATC
CTCTACTTCTACTCCTCCCTGAGCAGATTCCTCATGGTCATGGGGCCACCCTGTTATGTACTCTGCATC
ACGTTGGGTGGTTTCCATTTAGACCGAGCCGGTTCAGAACTTCCAAATGATGGTCTCCTCCTGACGT
TGTAATCAGGACCCCAACAATAACTTACAGGAAGGCACTGATCCTGAACTGAAGACCCCAACCCCTC
CCTCCAGACAGGGATGTAAGTAGATGGCGAGCAGACCAGCCCTCCTTTATGAGCAGCATGGCTTGCT
TCAAGACTTTCTTGCCTCTCTTCTCCAGAAGGCCCCCCAGCCATCGAAAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC200693 representing NM_001010989
Red=Cloning site Green=Tags(s)

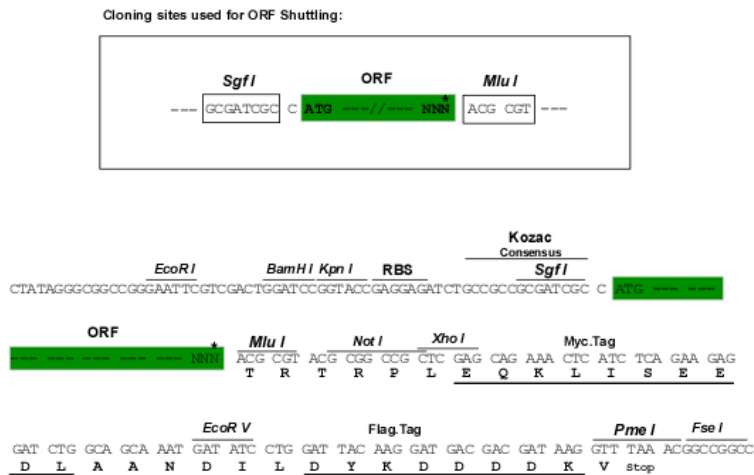
MESETEPEPVTLVVKSPNQHRDLELSGDRGWSVGHKKAHLRVYPERPRPEDQRLIYSGKLLLDHQCLR
 DLLPKQEKRHVHLVVCNVKSPSKMPEINAKVAESTEEPAGSNRQYYPEDSSDGLRQREVLNRLSSPGWE
 NISRPEAAQAFQGLGPGFSGYTPYGLQLSWFQQIYARQYMQYLAATAASGAFVPPPSAQEIPVVSAP
 APAPIHNQFPAENQAPANQNAAPQVVVNPANQNLRMNAQGGPIVEEDDEINRDWLDWTYSAAATFSVFLSI
 LYFYSSLSRFLMVMGATVVMYLHHVGVFPFRPRPVQNFNDGPPDPVVNQDPNNNLQEGTDPETEDPNHL
 PPDRLVDLGEQTSFSFMSTAWLVFKTFASLLPEGPPAIAN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2944_c09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_001010989

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_001010989.3](#)

RefSeq Size: 2195 bp

RefSeq ORF: 1173 bp

Locus ID: 9709

UniProt ID: [Q15011](#)

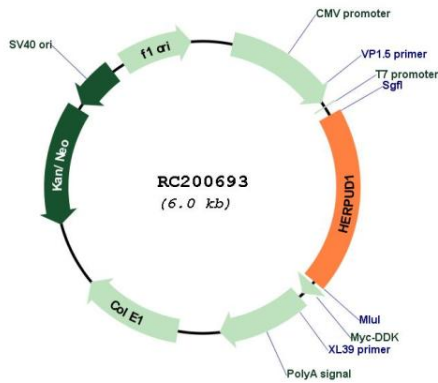
Cytogenetics: 16q13

Protein Families: Druggable Genome

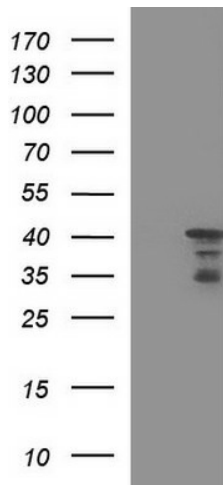
MW: 43.4 kDa

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]

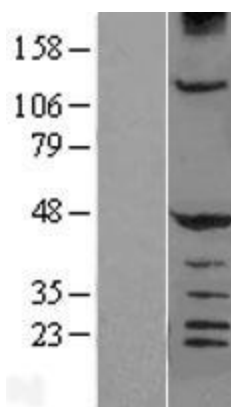
Product images:



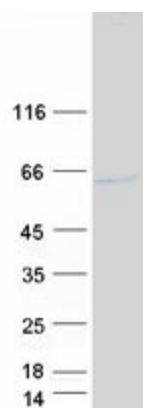
Circular map for RC200693



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY HERPUD1 (Cat# RC200693, 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-HERPUD1 (Cat# [TA507019]). Positive lysates [LY423260] (100ug) and [LC423260] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY423260]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200693 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HERPUD1 protein (Cat# [TP300693]). The protein was produced from HEK293T cells transfected with HERPUD1 cDNA clone (Cat# RC200693) using MegaTran 2.0 (Cat# [TT210002]).