

## Product datasheet for **RC207200**

### HEF1 (NEDD9) (NM\_006403) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	HEF1 (NEDD9) (NM_006403) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HEF1
Synonyms:	CAS-L; CAS2; CASL; CASS2; HEF1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC207200 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGAAGTATAAGAATCTTATGGCAAGGGCCTTATATGACAATGTCCAGAGTGTGCCGAGGAACCTGGCCT  
 TTCGCAAGGGAGACATCCTGACCGTCATAGAGCAGAACACAGGGGACTGGAAGGATGGTGGCTGTGCTC  
 GTTACACGGTCGCAAGGCATTGTCCAGGCAACCGGGTGAAGCTTCTGATTGGTCCCATGCAGGAGACT  
 GCCTCCAGTACGAGCAGCCTGCCTCTGGACTGATGCAGCAGACCTTTGGCCAACAGAAGCTCTATCAAG  
 TGCCAAACCCACAGGCTGCTCCCGAGACACCATCTACCAAGTCCACCTTCTACCAAAAATCAGGGAAAT  
 TTACCAAGTCCCCACTGGCCACGGCACCAAGAACAAGAGGTATATCAGGTGCCACCATCAGTGCAGAGA  
 AGCATTGGGGGAACAGTGGGCCCCACGTGGGTAAAAAGGTGATAACCCCGTGAGGACAGGCCATGGCT  
 ACGTATACGAGTACCCATCCAGATACCAAAAGGACGTCTATGATATCCCTCCTTCTCATACCACTCAAGG  
 GGTATACGACATCCCTCCCTCATCAGAAAAGGCCCTGTGTTTTTCAGTTCAGTGGGAGAGATAAAACCT  
 CAAGGGGTGTATGACATCCCGCCTACAAAAGGGGTATATGCCATTCGGCCCTCTGCTTGCCGGGATGAAG  
 CAGGGCTTAGGAAAAAGACTATGACTTCCCCCTCCCATGAGACAAGCTGGAAGGCCGGACCTCAGACC  
 GGAGGGGGTTTATGACATTCTCCAACCTGCACCAAGCCAGCAGGGGAAGGACCTTCATGTAAAATACAAC  
 TGTGACATTCCAGGAGCTGCAGAACCGGTGGCTCGAAGGCACCAGAGCCTGTCCCGAATCACCCACCCC  
 CGCAACTCGGACAGTCACTGGGCTCTCAGAACGACGCATATGATGTCCCGGAGGCGTTCAGTTTCTTGA  
 GCCACCAGCAGAAACAGTGAGAAAGCAAAACCCCAAGGAAAGGGATGGTGTATGATGTCCCTCTGCAT  
 AACCCGCCAGATGCTAAAGGCTCTCGGGACTTGGTGGATGGGATCAACCGATTGCTTTTCCAGTACAG  
 GCAGACCCGGAGTAACATGTCCAGTCTTCCACCTCCTCAAGGAGTCCCTCACTGTCCAGCTCCCAGC  
 TCAGGACAAAAGGCTCTTCTGGATCCAGACACAGCTATTGAGAGACTTCAGCGGCTCCAGCAGGCCCTT  
 GAGATGGGTGTCTCCAGCCTAATGGCACTGGTCACTACCGACTGGCGGTGTACGGATATATGAAAAGAC  
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 GGGAGCTGTTGCAATGCTGCCTGCCTCCCGAACTCATCTCCACAACAAGATGAAGCGGGAGCTGCAA  
 CGAGTTGAAGACTCCCACCAGATCCTGAGTCAAACAGCCATGACTTAAATGAGTGCAGCTGGTCCCTGA  
 ATATCTTGGCCATCAACAAGCCCCAGAACAAGTGTGACGATCTGGACCGTTTGTGATGGTGGCAAAGAC  
 GGTGCCCGATGACGCCAAGCAGCTCACCAACCATCAACACCAACGCAGAGGCCCTCTCAGACCCGGC  
 CCTGGCAGCTTGATCTGAAGAATGGGCCGGAGAGCATCATGAACTCAACGGAGTACCCACACGGTGGCT  
 CCCAGGGACAGCTGCTGCATCCTGGTGACCACAAGGCCCAAGGCCACAACAAGGCACTGCCCCAGGCCCT  
 GAGCAAGGAGCAGGCCCTGACTGTAGCAGCAGTGTGTTCTGAGAGGAGCTGGATGGATGACTACGAT  
 TACGTCCACCTACAGGTAAGGAGGAGTTTGGAGGCAACAGAAAAGAGCTATTGGAAAAAGAGAATATCA  
 TGAAACAGAAACAAGATGCAGCTGGAACATCATCAGCTGAGCCAGTTCCAGCTGTTGGAACAAGAGATTAC  
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 AGTGCTCAGGATCGGCAGTTGCTGTGCTTCTACTATGACCAATGTGAGACCCATTTCAATTCCTTCTCA  
 ACGCCATTGACGCACTCTCAGTTGTGTGCTCAGCTCAGCCAGCCCCGCGAATCTCGTGGCACACAGCAA  
 GTTTGTCACTCAGTGCACACAACTGGTGTTCATTGGAGACAGCTGACACGGCAGGTGACTGCCCAAG  
 GACATTGCAACAAAGTCACTGAACTCCAGCAACCAGCTCTGCGAGCAGCTCAAGACCATAGTCATGGCAA  
 CCAAGATGGCCGCCCTCATTACCCAGCACCAGGCCCTGCAGGAAATGGTGCACCAAGTGCAGACCT  
 TTCTAGAAATGCCAGCTGTTCAAGCGCTCTTGTGCTGGAGATGGCAACGTTT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC207200 protein sequence  
Red=Cloning site Green=Tags(s)

MKYKNLMARALYDNVPECAEELAFRKGDILTVIEQNTGGLEGWWLCSLHGRQGI VPGNRV KLLIGPMQET  
ASSHEQPASGLMQQTFGQQKLYQVPNPQAAPRDTIYQVPPSYQNQGIYQVPTGHGTQEVEYVQVPPSVQR  
SIGGTS GPHVGGKVI TPVRTGHGYVVEYPSRYQKDVYDIPPSHTTQGVYDIPSSAKGPVFSVPVGEIKP  
QGVYDIPPTKGVYAIPPSACRDEAGLREKDYDFPPPMRQAGRPDLRPEGVYDIPPTCTKPAGKDLHVKYN  
CDIPGAAEPVARRHQSLSPNHPPPQLGQSVGSQNDAYDVPRGVQFLEPPAETSEKANPQERDGVYDVPLH  
NPPDAKGSRDLDVGINRLSFSSTGSTRSNMSTSSTSSKESSLASPAQDKRFLDPDTAIERLQRLQQAL  
EMGVSSLMALVTTDWRCYGYMERHINEIRTAVDKVELFLKEYLHFVKGAVANAACLPELILHNKMKRELQ  
RVEDSHQILSQTSHDLNECSWSLNILAINKPQNKCDLDRFVMVAKTVPDDAKQLTTTINTNAEALFRPG  
PGSLHLKNGPESIMNSTEYPHGGSQGQLLHPGDHKAQAHNKALPPGLSKEQAPDCSSSDGSESWMDYD  
YVHLQGKEEFERQQKELLEKENIMKQNKMLEHHQLSQFQLLEQEITKPVENDISKWKPSQSLPTTNSGV  
SAQDRQLLCFYDQCETHFISLLNAIDALFSCVSSAQPPRIFVAHSKFVILSAHKLVFIGDTLTRQVTAQ  
DIRNKVMNSSNQLCEQLKTIVMATKMAALHYPSTTALQEMVHQVTDLSRNAQLFKRSLLEMATF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6141\\_c10.zip](https://cdn.origene.com/chromatograms/mk6141_c10.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**


**ACCN:** NM\_006403

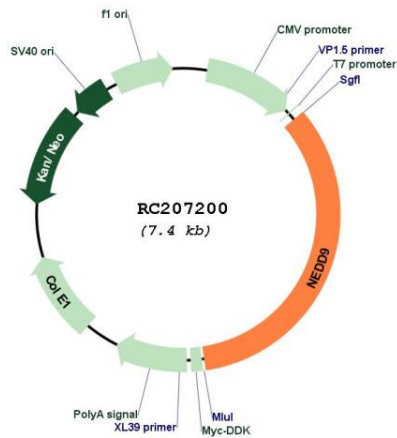
**ORF Size:** 2502 bp

**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](#)

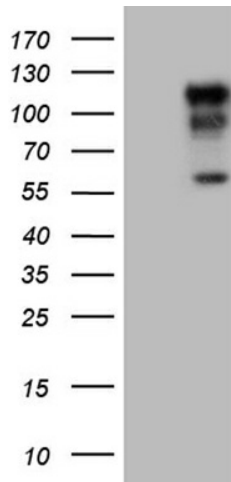
**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**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).

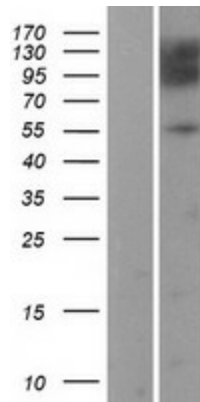
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_006403.2</a> , <a href="#">NP_006394.1</a>
<b>RefSeq Size:</b>	4550 bp
<b>RefSeq ORF:</b>	2505 bp
<b>Locus ID:</b>	4739
<b>UniProt ID:</b>	<a href="#">Q14511</a>
<b>Cytogenetics:</b>	6p24.2
<b>Domains:</b>	SH3
<b>MW:</b>	92.9 kDa
<b>Gene Summary:</b>	The protein encoded by this gene is a member of the CRK-associated substrates family. Members of this family are adhesion docking molecules that mediate protein-protein interactions for signal transduction pathways. This protein is a focal adhesion protein that acts as a scaffold to regulate signaling complexes important in cell attachment, migration and invasion as well as apoptosis and the cell cycle. This protein has also been reported to have a role in cancer metastasis. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2012]

**Product images:**


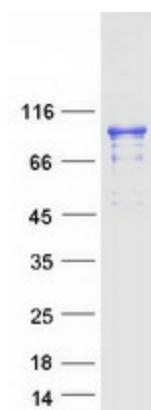
Circular map for RC207200



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY NEDD9 (Cat# RC207200, 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-NEDD9 (Cat# [TA809513])(1:2000). Positive lysates [LY401924] (100ug) and [LC401924] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY428064]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC227437] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NEDD9 protein (Cat# [TP307200]). The protein was produced from HEK293T cells transfected with NEDD9 cDNA clone (Cat# RC207200) using MegaTran 2.0 (Cat# [TT210002]).