

## Product datasheet for RC219024

### UBE3B (NM\_130466) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	UBE3B (NM_130466) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	UBE3B
Synonyms:	BPIDS; KOS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC219024 representing NM_130466 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTTACCCCTGTCTCAGACCTCGAGAGCATGGTTCATCGATAGAGCCCGTCAGGCACGAGAAGAAAGGC  
TTGTGCAGAAGGAACGGGAGCGGGCAGCTGTTGTGATCCAGGCCCATGTCCGGAGTTTTCTGTGCGGAG  
TCGACTGCAGAGAGATATCAGGAGAGAGATTGATGACTTTTTAAAGCAGATGACCCTGAGTCCACTAAA  
AGAAGTGCACCTTTGTATTTCAAGATTGCCAGGAACTGCTGTTCTATTCAAGATCAAAGAGGATAATG  
AGAGATTTGAGAAGTTGTGTCGACGATCCTGAGCAGCATGGATGCTGAGAATGAGCCTAAGGTGTGGTA  
TGTGTCCCTGGCTTGTCTAAGGACCTCACCTCCTTTGGATTCAACAGATCAAGAACATTTTGTGGTAC  
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CGATGCTTGTACCTTCACAGACTTCAACGTGGAAAATTTCTCGGGGAAAAGGTGAAAGTCTTCGACC  
AGCGATGAACCACATTTGTGCAATATAATGGGACATCTCAACCAGCATGGATTTTATTCTGTGCTGCAG  
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CTCTAGCGTTACGCCCTGTGATTGCTGCACAGTCTCAGACAATCTGATTCGGCCGTTCCATCCACAT  
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TCAGGCCGTGTCGGGGTAAACGGGTCGACTCTGCAGAAGTCCAGAAGTTTGAACATCTGTGCTCCTCA  
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CTGCTTCCAAACTGTGGGCATTTATCTGTGAGCTCGGGCCCCACGGAGGGTTAAAGCTCTTCTTGAAT  
 GCCTGAACAATGACACTGAAGAGTCCAAGCAACTCTTGGCCATGCTGATGCTGTTCTGTGACTGTTCCGC  
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 CTCGCGAGAAGCTGCGCTACGCCATCAGCATGAACACGGGCTTTGAACTCTCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
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**Protein Sequence:**

>RC219024 representing NM\_130466  
 Red=Cloning site Green=Tags(s)

MFTLSQTSRAWFIDRRARQAREERLVQKERERAAVVIQAHVRSFLCRSRLQRDIRREIDFFKADDPSTK  
 RSALCIFKIARKLLFLRIKEDNERFEKLCRSILSSMDAENEPKVWVYVSLACSKDLTLLWIQQIKNILWY  
 CCDFLKQLKPEILQDSRLITLYLTMLVFTDTSTWKILRGKESLRPAMNHICANIMGHLNQHGFYSVLQ  
 ILLTRGLARPRCLSKGTLTAAFSALALRPVIAAQFSDNLIRPFLIHIMSVPALVTHLSTVTPERLTVLES  
 HDMLRKFIIIFLRDQDRCDVCELEGCHTLCLMGNLLHLGSLSPRVLEETDGFVSLLTQTLCYCQKYVS  
 QKKNLTHWHPVLGWFSSQVDYGLNESMHLITKQLQFLWGVPLIRIFFCDILSKLLESQEPAAHQASP  
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 LLPKLWAFICELGPHGGLKLFLECLNNDTEESKQLLAMLMFCDCSRHLITLDDIEVYEEQISFKLEEL  
 VTISSFLNSFVKMIWDGIVENAKGETLELFQSVHGLMVLVERDCRRRFTPEDHWLRKDLKPSVLFQEL  
 DRDRKRAQLILQYIPHVIPHKNRVLLFRMTVTEKEKGLVETSSASPHVTHITIRSRMLEDGYEQLRQ  
 LSQHMKGVIRVKFVNDLGVDEAGIDQDGVFKEFLEEIIKRVDPALNLFKTTSGDERLYPSPTSYPHEN  
 YLQLFEFVGKMLGKAVYEGIVDVPFASFFLSLLGHHHSVFYSSVDELPSLDSEFYKNLTSIKRYDGI  
 TDLGLTLYDEDMGQLVCHLIPGGKITPVNTENKISYIHLMAHFRMHTQIKNQTAALISGFRSIIKPE  
 WIRMFSTPELQRLISGDNAEIDLEDLKKHTVYYGGFHGSHRVI IWLWDILASDFTPDERAMFLKFVTS  
 RPPLLGFAYLKPPFSIRCVESVDDQDGTDLGSVLRGFFTIKREPPGRLPTSSCTFNLLKLPNYSKKS  
 VLRKLRVYISMNTGFELS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_130466

**ORF Size:** 3204 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\\_130466.4](#)

**RefSeq Size:** 5753 bp

**RefSeq ORF:** 3207 bp

**Locus ID:** 89910

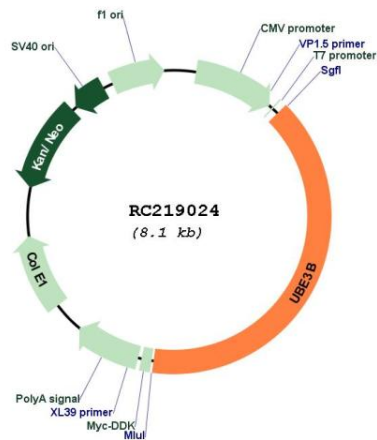
**UniProt ID:** [Q7Z3V4](#)

**Cytogenetics:** 12q24.11  
**Protein Families:** Druggable Genome  
**Protein Pathways:** Ubiquitin mediated proteolysis

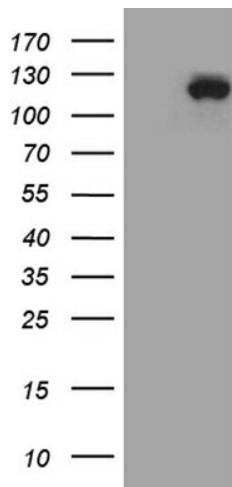
**MW:** 122.9 kDa

**Gene Summary:** The modification of proteins with ubiquitin is an important cellular mechanism for targeting abnormal or short-lived proteins for degradation. Ubiquitination involves at least three classes of enzymes: E1 ubiquitin-activating enzymes, E2 ubiquitin-conjugating enzymes, and E3 ubiquitin-protein ligases. This gene encodes a member of the E3 ubiquitin-conjugating enzyme family which accepts ubiquitin from an E2 ubiquitin-conjugating enzyme and transfers the ubiquitin to the targeted substrates. A HECT (homology to E6-AP C-terminus) domain in the C-terminus of the longer isoform of this protein is the catalytic site of ubiquitin transfer and forms a complex with E2 conjugases. Shorter isoforms of this protein which lack the C-terminal HECT domain are therefore unlikely to bind E2 enzymes. Alternatively spliced transcript variants encoding distinct isoforms have been identified for this gene. [provided by RefSeq, Jul 2012]

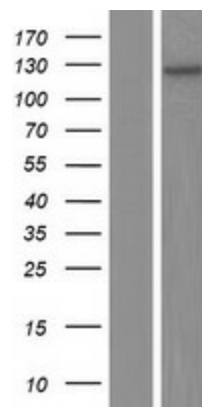
**Product images:**



Circular map for RC219024



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY UBE3B (Cat# RC219024, 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-UBE3B (Cat# [TA806667])(1:2000). Positive lysates [LY408916] (100ug) and [LC408916] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY408916]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC219024 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).