

Product datasheet for **RC204675**

UBE1C (UBA3) (NM_003968) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	UBE1C (UBA3) (NM_003968) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	UBE1C
Synonyms:	hUBA3; NAE2; UBE1C
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC204675 representing NM_003968
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCGGATGGCGAGGAGCCGGAGAGGAAAAGAAGGAGAATAGAGGAGCTGCTGGCTGAGAAAATGGCTG
 TTGATGGTGGGTGTGGGGACACTGGAGACTGGGAAGTCGCTGGAACCATGTAAAGAAGTTCCTCGAGCG
 ATCTGGACCCCTTACACACCCTGATTTCAACCGAGCACTGAATCTCTCCAGTCTTGTAGATACATGT
 AAAGTTCTAGTCATTGGAGCTGGCGGCTTAGGATGTGAGCTCCTGAAAAATCTGGCCTTGTCTGGTTTTA
 GACAGATTCATGTTATAGATATGGACACTATAGATGTTTCCAATCTAAATAGGCAGTTTTTATTTAGGCC
 TAAAGATATTGGAAGACCTAAGGCTGAAGTTGCTGCAGAAATTTCTAAATGACAGAGTTCCTAATTGCAAT
 GTAGTTCCACATTTCAACAAGATTCAAGATTTTAAACGACACTTTCTATCGACAATTTTATATTGAT
 GTGGACTGGACTCTATCATCGCCAGAAGATGGATAAATGGCATGCTGATATCTCTTCTAATTTATGAAGA
 TGGTGTCTTAGATCCAAGCTCCATTGTCCCTTTGATAGATGGGGGACAGAAGGTTTTAAAGGAAATGCC
 CGGGTATTCTGCCTGGAATGACTGCTTGTATCGAATGCACGCTGGAACCTTTATCCACCACAGGTTAATT
 TTCCCATGTGCACCATTGCATCTATGCCAGGCTACCAGAACACTGTATTGAGATGTAAGGATGTTGCA
 GTGGCCTAAGGAGCAGCCTTTTGGAGAAGGGTCCATTAGATGGAGATGATCCTGAACATATACAATGG
 ATTTTCCAAAAATCCCTAGAGAGAGCATCAACAATAATATTAGGGGTGTACGTATAGGCTCACTCAAG
 GGGTAGTAAAAAGAATCATTCTGCAGTAGCTCCACAATGCAGTCATTGCAGCTGTGTGTGCCACTGA
 GGTTTTTAAAAATAGCCACAAGTGCATACATTCCCTTGAATAATTACTTGGTGTAAATGATGTAGATGGG
 CTGTATACATACATTTGAAGCAGAAAGAAAGGAAAACCTGCCAGCTTGTAGCCAGCTTCTCAAATA
 TTCAGTTTTCTCCATCAGCTAAACTACAGGAGGTTTTGGATTATCTAACCAATAGTGCTTCTCTCAAAT
 GAAATCTCCAGCCATCACAGCCACCCTAGAGGGAAAAAATAGAACAATTTACTTACAGTCGGTAACCTCT
 ATTTGAAGAACGAACAAGCCAAATCTCTCCAAAACATTGAAAGAATTGGGGCTTGTGATGGACAAGAAC
 TGGCGGTTGCTGATGTCACCACCCACAGACTGTACTATTCAAATTCATTTTACTTCT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC204675 representing NM_003968
 Red=Cloning site Green=Tags(s)

MADGEEPERKRRRIEELLAEKMAVDGGCGDGDWEGRWNVKFLERSGPFTHPDFEPSTESLQFLLDTC
 KVLVIGAGGLGCELLKNLALSGFRQIHVIDMDTIDVSNLNRQFLFRPKDIGRPKAEVAAEFLNDRVPNCN
 VVPHFNKIQDFNDTFYRQFHII VCGLDISIARRWINGMLISLLNYEDGVLDPSSIVPLIDGGTEGFKGNA
 RVILPGMTACIECTLELYPPQVNFPMCTIASMPRLPEHCIEYVRMLQWPKEQPFGEVPLDGDPEHIQW
 IFQKSLERASQYNIRGVTYRLTQGVVKRIIPAVASTNAVIAAVCATEVFKIATSAYIPLNLYLVFNDVDG
 LYTYTFAERKENCPACSQLPQNIQFSPSAKLQEVLDYLTNSASLQMKSPAITATLEGKNRTLYLQSVTS
 IEERTRPNLSKTLKELGLVDGQELAVADVTPQTVLFKLHFTS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mg2876_a02.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_003968

ORF Size: 1389 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_003968.4](#)

RefSeq Size: 2136 bp

RefSeq ORF: 1392 bp

Locus ID: 9039

UniProt ID: [Q8TBC4](#)

Cytogenetics: 3p14.1

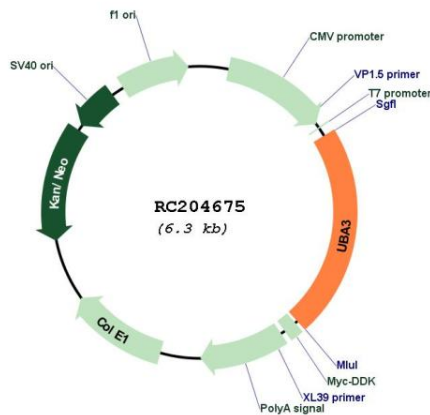
Domains: UBACT, ThiF

Protein Pathways: Ubiquitin mediated proteolysis

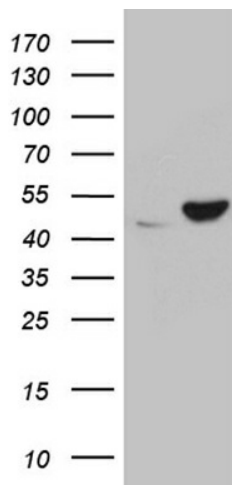
MW: 51.7 kDa

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: ubiquitin-activating enzymes, or E1s, ubiquitin-conjugating enzymes, or E2s, and ubiquitin-protein ligases, or E3s. This gene encodes a member of the E1 ubiquitin-activating enzyme family. The encoded enzyme associates with AppBp1, an amyloid beta precursor protein binding protein, to form a heterodimer, and then the enzyme complex activates NEDD8, a ubiquitin-like protein, which regulates cell division, signaling and embryogenesis. Multiple alternatively spliced transcript variants encoding distinct isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

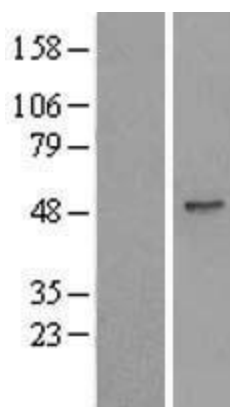
Product images:



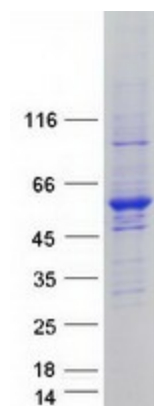
Circular map for RC204675



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY UBA3 (Cat# RC204675, 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-UBA3 (Cat# [TA811903]). Positive lysates [LY418315] (100ug) and [LC418315] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY418315]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204675 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified UBA3 protein (Cat# [TP304675]). The protein was produced from HEK293T cells transfected with UBA3 cDNA clone (Cat# RC204675) using MegaTran 2.0 (Cat# [TT210002]).