

Product datasheet for **RC236733**

Ubiquitin (UBB) (NM_001281717) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ubiquitin (UBB) (NM_001281717) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ubiquitin
Synonyms:	HEL-S-50
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC236733 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

RCATGCAGATCTTCGTGAAAACCCTTACCGGCAAGACCATCACCCCTTGAGGTGGAGCCCAGTGACACCAT
CGAAAAATGTGAAGGCCAAGATCCAGGATAAGGAAGGCATCCCCCGACCAGCAGAGGCTCATCTTTGCA
GGCAAGCAGCTGGAAGACGGCCGTACTTTCTGACTACAACATCCAGAAGGAGTCGACCCTGCACCTGG
TCCTGCGTCTGAGAGGTGGTATGCAGATCTTCGTGAAGACCCTGACCGGCAAGACCATCACCTGGAAGT
GGAGCCCAGTGACACCATCGAAAATGTGAAGGCCAAGATCCAGGATAAAGAAGGCATCCCTCCCGACCAG
CAGAGGCTCATCTTTGCAGGCAAGCAGCTGGAAGATGGCCGCACTCTTTCTGACTACAACATCCAGAAGG
AGTCGACCCTGCACCTGGTCTGCGTCTGAGAGGTGGTATGCAGATCTTCGTGAAGACCCTGACCGGCAA
GACCATCACTCTGGAGGTGGAGCCCAGTGACACCATCGAAAATGTGAAGGCCAAGATCCAAGATAAAGAA
GGCATCCCCCGACCAGCAGAGGCTCATCTTTGCAGGCAAGCAGCTGGAAGATGGCCGCACTCTTTCTG
ACTACAACATCCAGAAAGAGTCGACCCTGCACCTGGTCTGCGCTGAGGGTGGCTGT

ACGCGTACGCGGCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC236733 protein sequence
Red=Cloning site Green=Tags(s)

```
XCRSS*KPLPARPSPLRWSPVTPSKM*RPRSRIRKAFPPTSRGSSLQASSWKTAVLFLTTTSRRSRPCTW
SCV*EVVCRSS*RP*PARPSPWKWSPVTPSKM*RPRSRIKKASLPTSRGSSLQASSWKMAALFLTTTSRR
SRPCTWSCV*EVVCRSS*RP*PARPSLWRWSPVTPSKM*RPRSKIKKASPPTSRGSSLQASSWKMAALFL
TTTSRKS RPCTWSCA*GVA
```

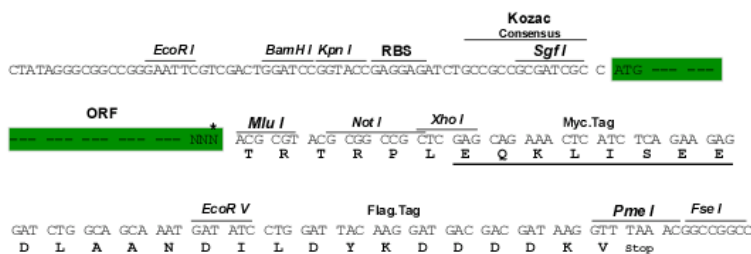
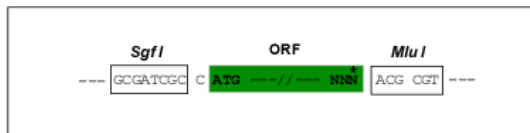
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg4162_c12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001281717

ORF Size: 687 bp

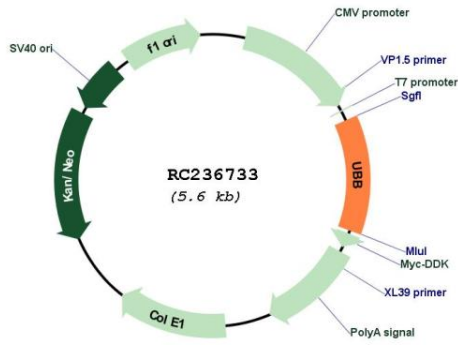
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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:	<ol style="list-style-type: none">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:	<u>NM_001281717.1, NP_001268646.1</u>
RefSeq Size:	1068 bp
RefSeq ORF:	690 bp
Locus ID:	7314
UniProt ID:	<u>P0CG47</u>
Cytogenetics:	17p11.2
Protein Families:	Druggable Genome
Protein Pathways:	Parkinson's disease
MW:	25.8 kDa
Gene Summary:	<p>This gene encodes ubiquitin, one of the most conserved proteins known. Ubiquitin has a major role in targeting cellular proteins for degradation by the 26S proteasome. It is also involved in the maintenance of chromatin structure, the regulation of gene expression, and the stress response. Ubiquitin is synthesized as a precursor protein consisting of either polyubiquitin chains or a single ubiquitin moiety fused to an unrelated protein. This gene consists of three direct repeats of the ubiquitin coding sequence with no spacer sequence. Consequently, the protein is expressed as a polyubiquitin precursor with a final amino acid after the last repeat. An aberrant form of this protein has been detected in patients with Alzheimer's disease and Down syndrome. Pseudogenes of this gene are located on chromosomes 1, 2, 13, and 17. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2013]</p>

Product images:



Circular map for RC236733