

Product datasheet for **RC236734**

Ubiquitin (UBB) (NM_001281718) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Ubiquitin (UBB) (NM_001281718) 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: >RC236734 representing NM_001281718.
Blue=ORF **Red**=Cloning site **Green**=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTACTATAGGGCCGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGCAGATCTTCGTGAAAACCTTACCGCAAGACCATCACCTTGAGGTGGAGCCAGTGACACCATC
GAAAATGTGAAGGCCAAGATCCAGGATAAGGAAGGCATCCCCCGACCAGCAGAGGCTCATCTTTGCA
GGCAAGCAGCTGGAAGACGGCCGTACTCTTTCTGACTACAACATCCAGAAGGAGTCGACCCTGCACCTG
GTCCTGCGTCTGAGAGGTGGTATGCAGATCTTCGTGAAGACCCTGACCGCAAGACCATCACCTGGAA
GTGGAGCCAGTGACACCATCGAAAATGTGAAGGCCAAGATCCAGGATAAAGAAGGCATCCCTCCCGAC
CAGCAGAGGCTCATCTTTCAGGCAAGCAGCTGGAAGATGGCCGACTCTTCTGACTACAACATCCAG
AAGGAGTCGACCCTGCACCTGGTCTGCGTCTGAGAGGTGGTATGCAGATCTTCGTGAAGACCCTGACC
GGCAAGACCATCACTCTGGAGGTGGAGCCAGTGACACCATCGAAAATGTGAAGGCCAAGATCCAAGAT
AAAGAAGGCATCCCCCGACCAGCAGAGGCTCATCTTTCAGGCAAGCAGCTGGAAGATGGCCGCACT
CTTCTGACTACAACATCCAGAAAGAGTCGACCCTGCACCTGGTCTGCGCTGAGGGGTGGCTGT
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGCGC
```

Protein Sequence: >Peptide sequence encoded by RC236734
Blue=ORF **Red**=Cloning site **Green**=Tag(s)

```
MQIFVKLTGKTITLEVEPSDTIENVKAKIQDKEGIPPDQQRLLIFAGKQLEDGRTLSDYNIQKESTLHL
VLRLRGMQIFVKLTGKTITLEVEPSDTIENVKAKIQDKEGIPPDQQRLLIFAGKQLEDGRTLSDYNIQ
KESTLHLVLRLRGMQIFVKLTGKTITLEVEPSDTIENVKAKIQDKEGIPPDQQRLLIFAGKQLEDGRT
LSDYNIQKESTLHLVLRLRGGC
TRTRPLEQKLISEEDLAANDILDYKDDDDKV
```

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



Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001281718

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:

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 Size: 1028 bp

RefSeq ORF: 690 bp

Locus ID: 7314

UniProt ID: [P0CG47](#)

Cytogenetics: 17p11.2

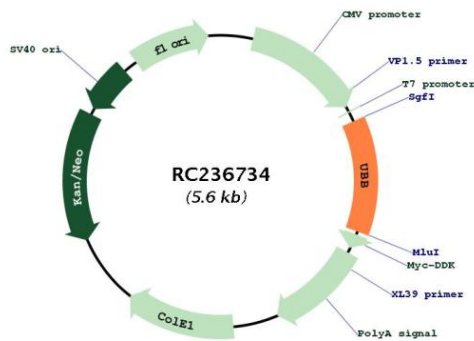
Protein Families: Druggable Genome

Protein Pathways: Parkinson's disease

MW: 25.8 kDa

Gene Summary: 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]

Product images:



Circular map for RC236734