

## Product datasheet for **RG236732**

### Ubiquitin (UBB) (NM\_001281716) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Ubiquitin (UBB) (NM_001281716) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ubiquitin
Synonyms:	HEL-S-50
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG236732 representing NM_001281716. Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGCAGATCTTCGTGAAAACCTTACCGCAAGACCATCACCTTGAGGTGGAGCCAGTGACACCATC
GAAAATGTGAAGCCAAGATCCAGGATAAGGAAGGCATCCCCCGACCAGCAGAGGCTCATCTTTGCA
GGCAAGCAGCTGGAAGACGGCCGTACTTTCTGACTACAACATCCAGAAGGAGTCGACCCTGCACCTG
GTCCTGCGTCTGAGAGGTGGTATGCAGATCTTCGTGAAGACCCTGACCGCAAGACCATCACCTGGAA
GTGGAGCCAGTGACACCATCGAAAATGTGAAGCCAAGATCCAGGATAAAGAAGGCATCCCTCCCGAC
CAGCAGAGGCTCATCTTTCAGGCAAGCAGCTGGAAGATGGCCGCACTCTTCTGACTACAACATCCAG
AAGGAGTCGACCCTGCACCTGGTCTGCGTCTGAGAGGTGGTATGCAGATCTTCGTGAAGACCCTGACC
GGCAAGACCATCACTCTGGAGGTGGAGCCAGTGACACCATCGAAAATGTGAAGCCAAGATCCAAGAT
AAAGAAGGCATCCCCCGACCAGCAGAGGCTCATCTTTGAGGCAAGCAGCTGGAAGATGGCCGCACT
CTTCTGACTACAACATCCAGAAAGAGTCGACCCTGCACCTGGTCTGCGCTGAGGGGTGGCTGT
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```



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**Protein Sequence:** >Peptide sequence encoded by RG236732  
 Blue=ORF Red=Cloning site Green=Tag(s)

MQIFVKLTGKTITLEVEPSDTIENVKAKIQDKEGIPPDQQRLLIFAGKQLEDGRTLSDYNIQKESTLHL  
 VLRLRGGMQIFVKLTGKTITLEVEPSDTIENVKAKIQDKEGIPPDQQRLLIFAGKQLEDGRTLSDYNIQ  
 KESTLHLVLRLRGGMQIFVKLTGKTITLEVEPSDTIENVKAKIQDKEGIPPDQQRLLIFAGKQLEDGRT  
 LSDYNIQKESTLHLVLRLRGGC  
 TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMKSTKGALTFSPYLLSHV  
 MGYGFYHFGTYPSTYENPFLHAINNGGYTNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPEP  
 SVIFTDKIIRSNAVHLPMDNDLDGSFTRTFSLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA  
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001281716

**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).

**RefSeq:** [NM\\_001281716.1](#), [NP\\_001268645.1](#)

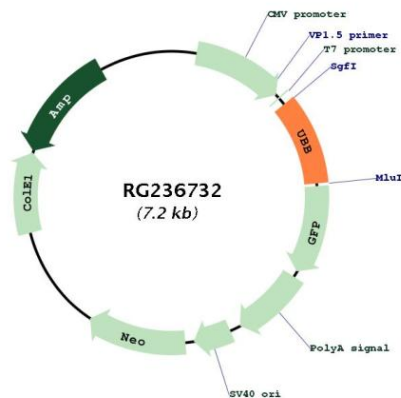
**RefSeq Size:** 1097 bp

**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 RG236732