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Product datasheet for RC201747

Ubiquitin (UBB) (NM_018955) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ubiquitin (UBB) (NM_018955) 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:

>RC201747 representing NM_018955.
Blue=ORF Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGCAGATCTTCGTGAAAACCCTTACCGGCAAGACCATCACCCTTGAGGTGGAGCCCAGTGACACCATC
GAAAATGTGAAGGCCAAGATCCAGGATAAGGAAGGCATTCCCCCCGACCAGCAGAGGCTCATCTTTGCA
GGCAAGCAGCTGGAAGATGGCCGTACTCTTTCTGACTACAACATCCAGAAGGAGTCGACCCTGCACCTG
GTCCTGCGTCTGAGAGGTGGTATGCAGATCTTCGTGAAGACCCTGACCGGCAAGACCATCACCCTGGAA
GTGGAGCCCAGTGACACCATCGAAAATGTGAAGGCCAAGATCCAGGATAAAGAAGGCATCCCTCCCGAC
CAGCAGAGGCTCATCTTTGCAGGCAAGCAGCTGGAAGATGGCCGCACTCTTTCTGACTACAACATCCAG
AAGGAGTCGACCCTGCACCTGGTCCTGCGTCTGAGAGGTGGTATGCAGATCTTCGTGAAGACCCTGACC
GGCAAGACCATCACTCTGGAGGTGGAGCCCAGTGACACCATCGAAAATGTGAAGGCCAAGATCCAAGAT
AAAGAAGGCATCCCCCCCGACCAGCAGAGGCTCATCTTTGCAGGCAAGCAGCTGGAAGATGGCCGCACT
CTTTCTGACTACAACATCCAGAAAGAGTCGACCCTGCACCTGGTCCTGCGCCTGAGGGGTGGCTGT
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Protein Sequence:

>Peptide sequence encoded by RC201747
Blue=ORF Red=Cloning site Green=Tag(s)

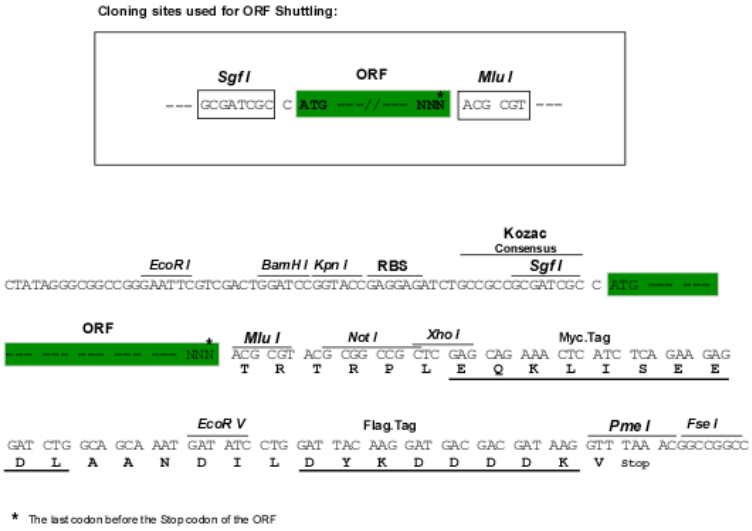
MQIFVKTLTGKTITLEVEPSDTIENVKAKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLHL
VLRLRGGMQIFVKTLTGKTITLEVEPSDTIENVKAKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQ
KESTLHLVLRLRGGMQIFVKTLTGKTITLEVEPSDTIENVKAKIQDKEGIPPDQQRLIFAGKQLEDGRT
LSDYNIQKESTLHLVLRLRGGC
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

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

View online »

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_018955

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

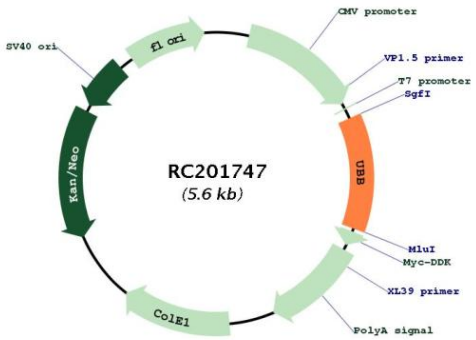
RefSeq: NM_018955.4

RefSeq Size: 971 bp

RefSeq ORF: 690 bp

Locus ID:	7314
UniProt ID:	P0CG47
Cytogenetics:	17p11.2
Domains:	UBQ
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 proteosome. 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 RC201747