

Product datasheet for SC334626

OriGene Technologies, Inc.

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Ubiquitin (UBB) (NM 001281716) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Ubiquitin (UBB) (NM_001281716) Human Untagged Clone

Tag: Tag Free Symbol: Ubiquitin Synonyms: HEL-S-50 **Mammalian Cell**

Selection:

Neomycin

Vector: pCMV6-Entry (PS100001) E. coli Selection: Kanamycin (25 ug/mL)

Fully Sequenced ORF: >NCBI ORF sequence for NM_001281716, the custom clone sequence may differ by one or

more nucleotides

ATGCAGATCTTCGTGAAAACCCTTACCGGCAAGACCATCACCCTTGAGGTGGAGCCCAGTGACACCATCG AAAATGTGAAGGCCAAGATCCAGGATAAGGAAGGCATTCCCCCCGACCAGCAGAGGCTCATCTTTGCAGG CAAGCAGCTGGAAGATGGCCGTACTCTTTCTGACTACAACATCCAGAAGGAGTCGACCCTGCACCTGGTC CTGCGTCTGAGAGGTGGTATGCAGATCTTCGTGAAGACCCTGACCGGCAAGACCATCACCCTGGAAGTGG GAGGCTCATCTTTGCAGGCAAGCAGCTGGAAGATGGCCGCACTCTTTCTGACTACAACATCCAGAAGGAG TCGACCCTGCACCTGGTCCTGCGTCTGAGAGGTGGTATGCAGATCTTCGTGAAGACCCTGACCGGCAAGA CCATCACTCTGGAGGTGGAGCCCAGTGACACCATCGAAAATGTGAAGGCCAAGATCCAAGATAAAGAAGG CATCCCCCCGACCAGCAGAGGCTCATCTTTGCAGGCAAGCAGCTGGAAGATGGCCGCACTCTTTCTGAC TACAACATCCAGAAAGAGTCGACCCTGCACCTGGTCCTGCGCCTGAGGGGTGGCTGTTAA

Restriction Sites: Sgfl-Mlul

ACCN: NM 001281716

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

> point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

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: <u>NM 001281716.1</u>, <u>NP 001268645.1</u>

RefSeq Size: 1097 bp
RefSeq ORF: 690 bp
Locus ID: 7314
UniProt ID: POCG47
Cytogenetics: 17p11.2

Gene Summary:

Protein Families: Druggable Genome
Protein Pathways: Parkinson's disease

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]

Transcript Variant: This variant (2) differs in the 5' UTR compared to variant 1. Variants 1, 2, 3, 4, 5, and 6 encode the same protein.