

## Product datasheet for **RG217695**

### USP2 (NM\_171997) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	USP2 (NM_171997) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	USP2
Synonyms:	UBP41; USP9
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG217695 representing NM_171997 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCGCACCTCGTACACCGTGACCCTGCCGAGGACCCCCCGCCGCCCTTTCCCGCCCTCGCCAAGG  
AGCTGCGGCCGCTCCCTCTCTCCCCGTCCTGCTGCTCTCCACCTTCGTGGGGCTCTGCTCAACAA  
AGCCAAGAATTCTAAGAGTGCCAGGGTCTGGCTGGTCTTCGAAACCTTGGGAACACGTGCTTCATGAAC  
TCAATTCTGCAGTGCCTGAGCAACTCGGGAGTTGAGAGATTACTGCCTCCAGAGGCTCTACATGCGGG  
ACCTGCACCACGGCAGCAATGCACACACAGCCCTCGTGAAGAGTTTGCAAACTAATTCAGACCATATG  
GACTTCATCCCCAATGATGTGGTGAGCCATCTGAGTTCAAGACCCAGATCCAGAGATACGCACCGCGC  
TTTGTTGGCTATAATCAGCAGGATGCTCAGGAGTTCCTTCGCTTTCTTCTGGATGGGCTCCATAACGAGG  
TGAACCGAGTGACTGAGACCTAAGTCCAACCTGAGAACCTCGATCATCTTCTGATGACGAGAAAGG  
CCGACAGATGTGGAGAAAATATCTAGAACGGGAAGACAGTAGGATCGGGGATCTCTTTGTTGGGCAGCTA  
AAGAGCTCGTGACGTGTACAGATTGTGGTTACTGTTCTACGGTCTTCGACCCCTTCTGGGACCTCTCAC  
TGCCCATGCTAAGCGAGGTTATCCTGAGGTGACATTAATGGACTGCATGAGGCTCTTACCAAAGAGGA  
TGTGCTTGATGGAGATGAAAAGCCAACATGCTGTCGCTGCCGAGGCAGAAAACGGTGTATAAAGAAGTTC  
TCCATCCAGAGGTTCCCAAAGATCTTGGTCTCCATCTGAAGCGGTTCTCAGAATCCAGGATCCGAACCA  
GCAAGCTCACAACATTTGTGAACCTCCCCCTAAGAGACCTGGACTTAAGAGAATTTGCCTCAGAAAACAC  
CAACCATGCTGTTTACAACCTGTACGCTGTGTCCAATCACTCCGGAACCCATGGGTGGCCACTATAACA  
GCCTACTGTGCGAGTCCAGGGACAGGAGAATGGCACACTTTCAACGACTCCAGCGTCACTCCCATGTCTCT  
CCAGCCAAGTGCGCACCAGCGACGCTACCTGCTCTTCTACGAAGTGGCCAGCCCGCCCTCCCGAATG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG217695 representing NM\_171997  
 Red=Cloning site Green=Tags(s)

MRTSYTVTLPEDPPAAPFPALAKELRPRSPLSPSLLLSTFVGLLLNKAKNSKSAQGLAGLRNLGNTCFMN  
 SILQCLSNTRRELRDYCLQRLYMRDLHHGSNAHTALVEEFAKLIQTIWTSSPNDVVPSEFKTIQRYAPR  
 FVGYNQDAQEFLRFLLDGLHNEVNRVTLRPKSNPENLDHLPDDEKGRQMRKYLKREDSDRIGDLFVGQL  
 KSSLTCTDCGYCSTVFDPFWDLSLPIAKRGYPEVTLMDCMRLFTEKEDVLDGDEKPTCCRCRGRKRCIKKF  
 SIQRFPKILVHLKRFSESRIRTSKLTTFVNFPLRDLDLREFASENTNHAVYNYLAVSNHSGTTMGGHYT  
 AYC RSPGTGEWHTFNDSSVTPMSSSQVRTSDAYLLFYELASPPSRM

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_171997

**ORF Size:** 1188 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:** [NM\\_171997.3](#)

**RefSeq Size:** 1378 bp

**RefSeq ORF:** 1191 bp

**Locus ID:** 9099

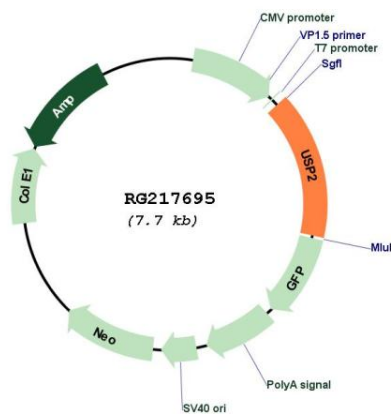
**UniProt ID:** [O75604](#)

**Cytogenetics:** 11q23.3

**Protein Families:** Protease

**Gene Summary:** This gene encodes a member of the family of de-ubiquitinating enzymes, which belongs to the peptidase C19 superfamily. The encoded protein is a ubiquitin-specific protease which is required for TNF-alpha (tumor necrosis factor alpha) -induced NF-kB (nuclear factor kB) signaling. This protein deubiquitinates polyubiquitinated target proteins such as fatty acid synthase, murine double minute 2 (MDM2), MDM4/MDMX and cyclin D1. MDM2 and MDM4 are negative regulators of the p53 tumor suppressor and cyclin D1 is required for cell cycle G1/S transition. Multiple alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Aug 2011]

### Product images:



Circular map for RG217695