

## Product datasheet for **RC222642**

### USP15 (NM\_006313) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	USP15 (NM_006313) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	USP15
Synonyms:	UNPH-2; UNPH4
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**ORF Nucleotide  
Sequence:**

>RC222642 representing NM\_006313  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCGGAAGCGGAGCGCGGATCTGGACACCCAGCGGTCTGACATCGGACGCTGCTCAAACCTCGC  
 TCCGAAAAGGGGACACCTGGTACCTAGTCGATAGTCGCTGGTTCAAACAGTGGAATAAATATGTTGGCTT  
 TGACAGTTGGGACAAATACCAGATGGGAGATCAAATGTGTATCCTGGACCCATTGATAACTCTGGACTT  
 CTCAAAGATGGTATGCCAGTCACTTAAGGAACACCTTATTGATGAATTGGATTACATACTGTTGCCAA  
 CTGAAGGTTGGAATAAATTGTCAGCTGGTACACATTGATGGAAGGTCAAGAGCCAATAGCACGAAAGGT  
 GGTTGAACAGGGTATGTTGTAAAGCACTGCAAAGTAGAAGTATATCTCACAGAATTGAAGCTATGTGAA  
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 GAATGAGAGGTGAAATAGCTAAATCTTATGCCGAAGTCAAGCAAATGTGGTCTGGAAAGTTTAGCTA  
 CGTCACCCCAAGAGCCTTAAAGACACAGGTAGGACGTTTTGCACCTCAGTTCTCTGGATATCAGCAGCAA  
 GACTGTCAAGAACTGTTAGCTTTCTATTAGATGGATTACATGAGGATTTGAATAGAATTAGGAAAAACA  
 CATAATACAATTAAGATGCAGATGGAAGGCCAGATAAAGTGGTTGCCGAAGAAGCCTGGGAAAAACCA  
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 CCCCAAAATTGGAACATATTAGATCTTTGTACAGCATTGTCTGCTTTGTGAGGAATACCTGCAGATAAG  
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 GAATGTGCCGATATGTCAAATATCTACTGAAACTGAAGAAACTGAAGGATCCCTACACTGCTGTAAAGGA  
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 CAAGTTGGATACCTTAGTTGATTTTCTATCAATGACTTGGATATGTCGGAATCTTAATTAATCCAAAT  
 GCAGGTCCTTGCCGCTATAATCTGATTGCTGTTTCCAACCACTATGGAGGGATGGGAGGAGGACACTATA  
 CTGCTTTTGCAAAAAATAAGATGATGGAATAAGTACTATTTTGTGACAGTAGTGTCTCCACTGCATC  
 TGAAGACCAAATGTGTCAAAGCAGCATATGACTCTTCTACCAGAGACAAGACACTTTCAGTGGAACT  
 GGCTTTTTCTCTTGACCGAGAACTAAAGGTGCTTCAGCTGCCACTGGCATCCATTAGAAAAGTGATG  
 AAGATAGCAATGATAATGACAATGATATAGAAAATGAAAAGTGTATGCACACTAAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC222642 representing NM\_006313  
 Red=Cloning site Green=Tags(s)

MAEGGAADLDTQRSDIATLLKTSRKGDTWYLVDSRWFKQWKYVGFDSWDKYQMGDQNVYPGPIDNSGL  
 LKDGDAQSLKEHLIDELDYILLPTGWNKLVSWYTLMEGQEPiARKVVEQGMFVKHCKVEVYLTELKLC  
 NGNMNNVTRRFKADTIDTIEKEIRKIFSIPEDEKTRLNKYSNTFEPLNKPDSIQDAGLYQGQVLV  
 IEQKNEDGTWPRGPSTPNVKNNSYCLPSYAYKNYDYSEPRNNEQPGLCGLSNLGNFCFMNSAIQCLSN  
 TPPLTEYFLNDKYQEELNFDNPLGMRGEIAKSYAELIKQMWSGKFSYVTPRAFKTQVGRFAPQFSGYQQQ  
 DCQELLAFLLDGLHEDLNRIKPKYIQLKDADGRPKVVAEEAWENHLKRNSIIVDIFHGLFKSTLVCP  
 ECAKISVTFDPFCYLTLPLPMKKERTLEVYLVRMDPLTKPMQYKVVVVKIGNILDLCALSLSGIPADK  
 MIVTDIYNHRFRHIFAMDENLSSIMERDDIYVFEININRTEDTEHVIIPVCLREKFRHSSYTHHTGSSLF  
 GQPFLMAVPRNNTEDKLYNLLLRLMCRYVKISTETEETEGSLHCKDQNINGNPNGIHEEGSPSEMETD  
 EPDDESSQDQELPSENENSQSEDSVGGDNSENGLCTEDTCKGQLTGHHKRLFTFQFNNLGNLDINIKD  
 DTRHIRFDDRQLRLDERFFLALDWDPLKKRYFDENAAEDFEKHSVEYKPPKPFVKLKDICIELFTTKE  
 KLGAEWPWYCPNCKEHQQAATKLDLWSPVVLVHLKRFYSRYMRDKLDTLVDFPINDLDMSEFLINPN  
 AGPCRYNLIIVSNHYGGMGGGHYTAFANKDDGKWWYFDSSSVSTASEDQIVSKAAYVLFYQRQDTFSGT  
 GFFPLDRETKGASAATGIPLESDESDNDNDNDIENENCMHTN

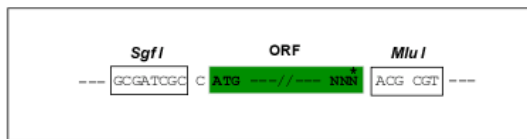
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mg3521\\_c06.zip](https://cdn.origene.com/chromatograms/mg3521_c06.zip)

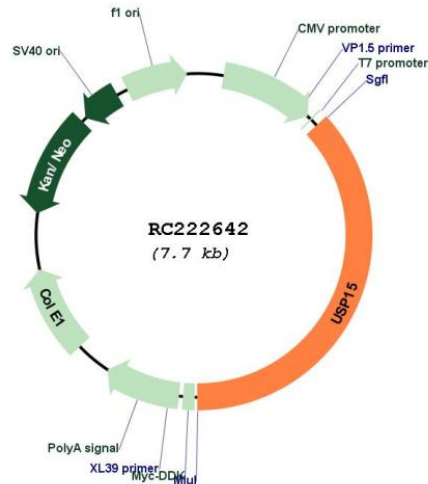
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**Plasmid Map:**


**ACCN:** NM\_006313

**ORF Size:** 2856 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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.

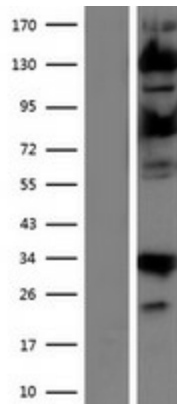
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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.

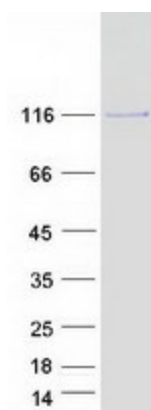
**RefSeq:** [NM\\_006313.3](#)  
**RefSeq Size:** 4611 bp  
**RefSeq ORF:** 2859 bp  
**Locus ID:** 9958  
**UniProt ID:** [Q9Y4E8](#)  
**Cytogenetics:** 12q14.1  
**Domains:** UCH, DUSP  
**Protein Families:** Druggable Genome, Protease  
**MW:** 109.1 kDa

**Gene Summary:** This gene encodes a member of the ubiquitin specific protease (USP) family of deubiquitinating enzymes. USP enzymes play critical roles in ubiquitin-dependent processes through polyubiquitin chain disassembly and hydrolysis of ubiquitin-substrate bonds. The encoded protein associates with the COP9 signalosome, and also plays a role in transforming growth factor beta signalling through deubiquitination of receptor-activated SMAD transcription factors. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene, and a pseudogene of this gene is located on the long arm of chromosome 2. [provided by RefSeq, Nov 2011]

### Product images:



Western blot validation of overexpression lysate (Cat# [LY416729]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222642 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified USP15 protein (Cat# [TP322642]). The protein was produced from HEK293T cells transfected with USP15 cDNA clone (Cat# RC222642) using MegaTran 2.0 (Cat# [TT210002]).