

## Product datasheet for RC205355

### USP12 (NM\_182488) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	USP12 (NM_182488) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	USP12
Synonyms:	UBH1; USP12L1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC205355 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAATCCTAATGACAGTCTCCAAATTCGCCTCCATCTGTACCATGGGCGCCAATGCTTCGGCATTAG  
AGAAAGAGATTGGTCCAGAACAGTTTCCGGTCAATGAGCACTATTTGGATTAGTCAATTTGGGAATAC  
CTGCTACTGCAATTCAGTCTTCAAGCACTTTATTTTGTGTCGTCATTCGGGAAAAAGTCTTGCGTAT  
AAGAGTCAACCTAGGAAAAAGGAGAGCCTTCTTACATGCTTAGCAGATCTTCCATAGCATAGCCACTC  
AGAAGAAAAAGGTTGGAGTAATACCCCTAAGAAGTTCATCACAAGATTACGAAAGAAAAATGAGCTTTT  
TGACAACATACGCAACAAGATGCCATGAATCTTAAATTACCTACTAAATACAATTGCTGATATTTTA  
CAAGAAGAGAGAAAGCAGGAAAAACAAATGGTCGTTTACCTAATGGTAATATTGATAATGAAAAATAA  
ACAGCACACCAGACCCAACGTGGGTTGATGAGATTTTTAGGGAACATTAATAATGAAACCAGATGCTC  
TACTTGTGAAACTATAAGCAGCAAAGATGAAGATTTTTAGACCTTTCTGTTGACGTGGAACAAAAATA  
TCAATTACTCACTGCTTAAGGGGTTTCAGCAACACAGAACTCTGTGCAGTGAATACAAGTATTACTGTG  
AAGAGTGTGCGCAGCAAACAGGAAGCACACAAACGGATGAAAGTAAAAAACTGCCATGATTCTAGCTCT  
ACACCTGAAGAGATTTAAATATATGGATCAACTCATCGATATACAAAATCTCTTACCGGTTAGTTTT  
CCTTTAGAACTTCGTCTGTTTAACTTCAGGTGATGCCACCAATCCAGACAGAATGACGACCTTGTTG  
CTGTTGGTTCCTGTGGAAGTGGTCCCAATCGAGGCCATTATTTGCAATAGTTAAGAGTCATGATTT  
TTGTTGTTGTTGATGACGACATTGTAGAAAAATAGATGCACAAGCTATTGAAGAATTCTACGGGTTG  
ACATCAGATATCTCAAAGAACTCTGAGTCTGGTTACATCCTTTTCTATCAGTCTCGGGAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTAA



[View online »](#)

**Protein Sequence:** >RC205355 protein sequence  
Red=Cloning site Green=Tags(s)

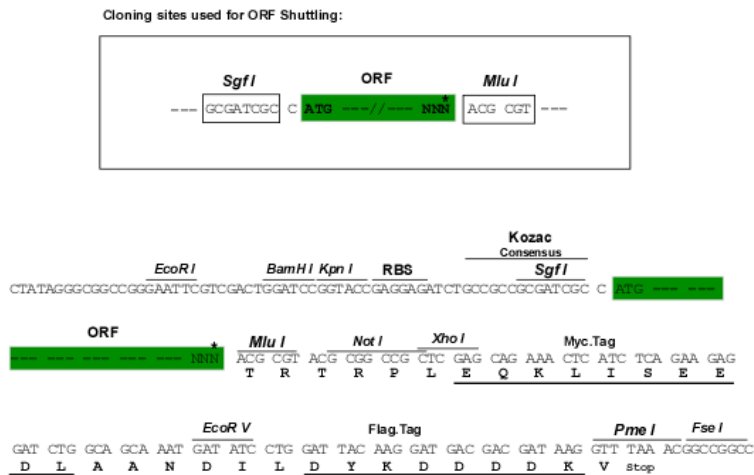
MEILMTVSKFASICTMGANASALEKEIGPEQFPVNEHYFGLVNFNGNTCYCNSVLQALYFCRPFREKVLAY  
 KSQPRKKESLLTCLADLFHSIATQKKKVGVIIPKKFITRLRKENELFDNYMQQDAHEFLNYLLNTIADIL  
 QEERKQEKQNGRLPNGNIDNENNNSTPDPTWVDEIFQGTLTNETRCLTCETISSKDEDFLDLSVDVEQNT  
 SITHCLRGF SNTETLCSEYKYYCEECRSKQEAHKRMKVKKLPMILALHLKRFKYMDQLHRYTKLSYRVVF  
 PLELRLFNTSGDATNPDRMYDLVAVVVHCGSGPNRGHYIAIVKSHDFWLLFDDDIIVEKIDAQAIEEFYGL  
 TSDISKNSESGYILFYQSRD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6028\\_b02.zip](https://cdn.origene.com/chromatograms/mk6028_b02.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



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

**ACCN:** NM\_182488

**ORF Size:** 1110 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\\_182488.2](#)

**RefSeq Size:** 4503 bp

**RefSeq ORF:** 1113 bp

**Locus ID:** 219333

**UniProt ID:** [O75317](#)

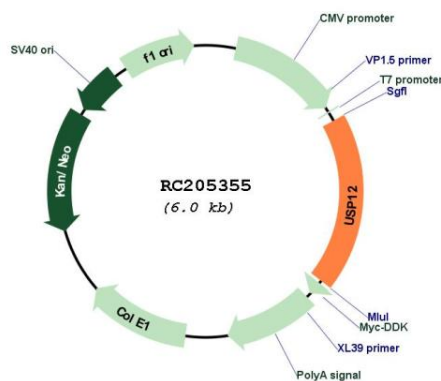
**Cytogenetics:** 13q12.13

**Protein Families:** Druggable Genome, Protease

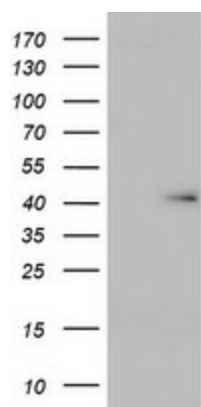
**MW:** 42.8 kDa

**Gene Summary:** Deubiquitinating enzyme. Has almost no deubiquitinating activity by itself and requires the interaction with WDR20 and WDR48 to have a high activity (PubMed:19075014, PubMed:27373336). Not involved in deubiquitination of monoubiquitinated FANCD2 (PubMed:19075014). In complex with WDR48, acts as a potential tumor suppressor by positively regulating PHLPP1 stability (PubMed:24145035).[UniProtKB/Swiss-Prot Function]

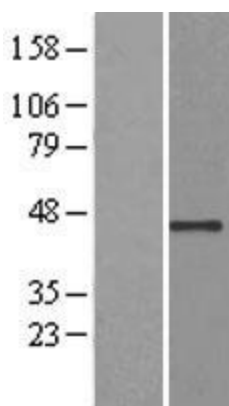
### Product images:



Circular map for RC205355



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY USP12 (Cat# RC205355, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-USP12 (Cat# [TA800037]). Positive lysates [LY403634] (100ug) and [LC403634] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY403634]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205355 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).