

Product datasheet for **RC200273**

USP2 (NM_004205) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	USP2 (NM_004205) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	USP2
Synonyms:	UBP41; USP9
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC200273 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCCCAGCTCTCTCCACCCTGAAGCGCTACACAGAATCGGCCCGCTACACAGATGCCACTATGCCA
 AGTCGGGCTATGGTGCCTACACCCCATCCTCCTATGGGGCCAATCTGGCTGCCTCCTTACTGGAGAAGGA
 GAAACTTGGTTTCAAGCCGGTCCCCACCAGCAGCTTCTCACCCGTCCCCGTACCTATGGCCCTCTCC
 CTCTGGACTATGACCGGGCGCCCTGCTGAGACCCGACATCACTGGGGTGGTAAGCGGGCAGAGA
 GCCAGACCCGGGTACTGAGCGGCTTTAGGCAGTGGCTCAGCGGGGCAGCGGATTCCTTATGGAGT
 GACCAACAACGCCTCAGCTACCTGCCATCAATGCCTATGACCAGGGGTGACCCTAACCCAGAAGCTG
 GACAGCCAATCAGACCTGGCCGGGATTTCTCCAGCTCCGGACCTCAGATAGCTACCGGATAGACCCCA
 GGAACCTGGGCCGAGCCCATGCTGGCCGGACGCGCAAGGAGCTCTGCACCCTGCAGGGGCTCTACCA
 GACAGCCAGCTGCCCTGAATACCTGGTCGACTACCTGGAGAATATGGTCGCAAGGGCAGTGCATCTCAG
 GTGCCCTCCCAGGCCCTCCCTCAGAGTCCCTGAAATCATCAGCCCAACCTACCGACCCATTGGCCGCT
 ACACGCTGTGGGAGACGGGAAAGGGTCAGGCCCTGGGCCAGCCGCTCCAGCTCCCCGGGAAGAGACGG
 CATGAATTCTAAGAGTGGCCAGGGTCTGGCTGGTCTTCGAAACCTTGGGAACACGTGCTTCATGAACTCA
 ATTCTGCAGTGCCTGAGCAACACTCGGGAGTTGAGAGATTACTGCCTCCAGAGGCTTACATGCGGGACC
 TGCACCACGGCAGCAATGCACACACAGCCCTCGTGAAGAGTTTGCAAACTAATTCAGACCATATGGAC
 TTCATCCCCAATGATGTGGTGAAGCTTCTGAGTTCAAGACCCAGATCCAGAGATATGCACCGCGCTTT
 GTTGGCTATAATCAGCAGGATGCTCAGGAGTTCCTTCGCTTTCTTCTGGATGGGCTCCATAACGAGGTGA
 ACCGAGTGACACTGAGACCTAAGTCCAACCTGAGAACCTCGATCATCTTCTGATGACGAGAAAGCCG
 ACAGATGTGGAGAAAATATCTAGAACGGGAAGACAGTAGGATCGGGGATCTCTTTGTTGGGACGCTAAAG
 AGCTCGTGACGTGTACAGATTGTGTTACTGTTCTACGGTCTTCGACCCCTTCTGGACCTCTCACTGC
 CCATTGCTAAGCGAGGTTATCCTGAGGTGACATTAATGGACTGCATGAGGCTTTCACCAAAGAGGATGT
 GCTTGATGGAGATGAAAAGCCAACATGCTGTCGCTGCCGAGGCAGAAAACGGTGTATAAAGAAGTTCTCC
 ATCCAGAGGTTCCCAAAGATCTTGGTCTCCATCTGAAGCGTCTCAGAATCCAGGATCCGAACCAGCA
 AGCTCACAACTTTGTAACCTCCCCCTAAGAGACCTGGACTTAAGAGAATTTGCCTCAGAAAACACCAA
 CCATGCTGTTTACAACCTGTACGCTGTGTTCAATCACTCCGAACCACCATGGGTGGCCACTATACAGCC
 TACTGTGCGAGTCCAGGGACAGGAGAATGGCACACTTTCAACGACTCCAGCGTCACTCCCATGTCCTCCA
 GCCAAGTGGCACCAGCGACGCCTACCTGCTTCTACGAACTGGCCAGCCCGCCCTCCCGAATG

ACGCGTACGCGGGCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC200273 protein sequence
 Red=Cloning site Green=Tags(s)

MSQLSSTLKRYTESARYTDAHYAKSGYGAYTPSSYGANLAASLLEKEKLGFKPVPTSSFLTRPRTYGPSS
 LLDYDRGRPLLRPDITGGGKRAESQTRGTERPLGSGLSGGSGFPYGVNTNCLSYLPINAYDQGVTLTQKL
 DSQSDLARDFSSLRTSDSYRIDPRNLGRSPMLARTRKELCTLQGLYQTASCEPYLVDYLENYGRKGSASQ
 VPSQAPPSRVPEIISPTYRPIGRYTLWETGKGQAPGPSRSSSPGRDGMNSKSAQGLAGLRNLGNTCFMNS
 ILQCLSNTRERLDYCLQRLYMRDLHHSNAHTALVEEFAKLIQT IWTSSPNDVVSPEFKTQIQRYAPRF
 VGYNQDAQEFLRFLLDGLHNEVNRVTLRPKSNPENLDHLPDDEKGRQMWRYLEREDSRIGDLFVGQLK
 SSLTCTDCGYCSTVDFPFDLSLPIAKRGYPEVTLMDCMRLFTEKEDVLDGDEKPTCCRCRGRKRKICKFS
 IQRFPKILVHLKRFSESRIRTSKLTTFVNFPLRDLDLREFASENTNHAVYNLYAVSNHSGTTMGHYTA
 YCRSPGTGEWHTFNDSSVTPMSSSQVRTSDAYLLFYELASPPSRM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6150_a06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004205

ORF Size: 1815 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 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_004205.2](#)

RefSeq Size: 3748 bp

RefSeq ORF: 1818 bp

Locus ID: 9099

UniProt ID: [O75604](#)

Cytogenetics: 11q23.3

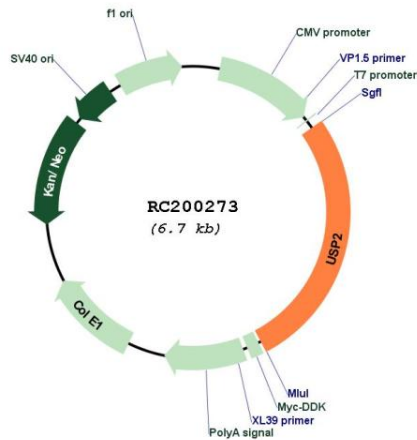
Domains: UCH

Protein Families: Protease

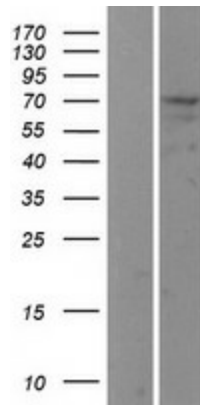
MW: 68.1 kDa

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 RC200273



Western blot validation of overexpression lysate (Cat# [LY401351]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200273 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).