

Product datasheet for **MC203948**

Usp2 (NM_016808) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Usp2 (NM_016808) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Usp2
Synonyms:	B930035K21Rik; Ubp41
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >BC017517
 CTCACGCTCTGGAGGCTACACAGCAGTCTTTCCCTTCGGGGAAAGAAGCCCCAGGCTCCATCCAGTG
 CCCCCAACACAGCCCATGAGGCTCCCAGTACCCACTGAGTACCACCCTGAAGGATGTCCCAGTCTCCTC
 CACCCTGAAGCGCTATACAGAATCGTCCCGCTACACAGATGCCCCCTATGCCAAACCGGGCTATGGCACC
 TACACCCTTCTCCTATGGGGCAACCTGGCCGCTCCTTCTGGAGAAGGAAAACTTGGTTTCAAGC
 CGGTCTCCCCACCAGCTTCTCCACGGCCCCGCACCTACGGCCCTCCTCATTCTGGACTGTGACAG
 GGGCCGCCCTGCTGAGATCTGACATCATTGGGAGTAGTAAGCGGTGAGAGAGCCAGACCCGTGGCAAC
 GAAAGGCCCTCGGCAGTGGACTCAACGGAGGCAGTGGATTTTCTTATGGAGTTTCCAGCAACTCCCTCA
 GCTACCTGCCATGAATGCCAGAGACCAGGGGTGACCCTGAGCCAGAAGAAATCGAACAGCCAATCAGA
 CCTGGCCCGGATTTCTCCAGCCTCCGGACTTCAGATGGCTACCGGACTTCAGATGGCTACCGGACCTCA
 GAGGGCTTTAGGATAGACCCTGGAAACCTGGTTCGCAGCCCCATGCTGGCCCGCACGCGTAAGGAGCTCT
 GTGCCCTGCAGGGCTCTACCAAGCAGCCAGCCGTTCTGAGTACCTAACAGACTATCTGGAGAATATGG
 TCGAAAGGGCAGTGCACCACAGGTGCTCAGCAAGCCCTCCTCCCTCCCGAGTCCCTGAAGTCTCAGT
 CCCACCTACCGACCAAGTGGCCGTTACACACTGTGGGAGAAGAGCAAGGGCCAGGCTCTGGGCCAGCC
 GCTCCAGTTCTCCAGGGCAGACACCATGAATTCAAAGAGTGCCAGGGTCTGGTGGTCTTCGAAACCT
 TGGGAACACGTGCTTCATGAACTCAATTCTCAGTGCCTGAGCAACACCCGAGAGCTGAGAGATTACTGC
 CTCCAGAGGCTGTACATGCGGGACCTCGGCCACACCAGCAGCGCTCACACGGCCCTCATGGAAGAGTTTG
 CAAAACTAATCCAGACCATATGGACGTCGTCGCCCAATGATGTGGTGAGCCCATCTGAGTTCAAGACCCA
 GATCCAGAGATATGCGCCACGCTTCATGGGCTATAATCAGCAGGATGCTCAGGAATTCCTTCGTTTCCTT
 CTGGATGGTCTCCACAATGAGGTGAACCGGGTGGCAGCAAGGCCTAAGGCCAGCCCTGAGACCCTTGATC
 ATCTCCCTGATGAAGAAAAGGGGCGACAGATGTGGAGGAAGTATCTGAAAGGGAAGACAGTCGGATTGG
 GGATCTTCTCGTTGGGCAGCTGAAGAGCTCCCTCACATGCACCGATTGTGGCTACTGCTTACAGTCTTC
 GATCCCTTCTGGGATCTCTCGTTGCCATCGCAAAGAGAGGTTACCCTGAGGTGACGTTAATGGATTGTA
 TGAGGCTCTTACCAAAGAGGACATATTGGATGGTATGAGAAGCCAATTGCTGCCGCTGCCGAGCCAG
 AAAACGATGCATAAAAAAGTTCTCTGTCCAGAGGTTCCCAAAGATCTTGGTGCTCCACCTGAAGCGATTC
 TCAGAATCCAGGATACGAACCAGCAAGCTCACAACTTTGTGAATTTCCCACTAAGAGACCTGGACTTGA
 GAGAATTTGCTTCAGAAAAACCAACCATGCTGTTTACAACCTGTATGCTGTGTCCAATCACTCCGGAAC
 CACCATGGGAGGCCACTATACAGCCTACTGCCAAGTCCGGTTACAGGCGAATGGCACACTTTCAATGAT
 TCCAGTGTACACCCATGTCTCCAGCCAAGTGCACACCAGCGACGCTATTTGCTCTTCTATGAACTGG
 CCAGTCCACCCTCCCGTATGTAGCATTGAGGAGCTGCGGCCCTTCCCTCTTCCCTGTGGTGGCCCCACGT
 CCTAAGTTTTTTTTAAAAAATTCAGAAAAAAAAAAAAAAAAACACCACAAAAAAAAAAAAACCAAAAAAAAAA AAAAAAAAAAAAAA

Restriction Sites: RsrII-NotI

ACCN: NM_016808

Insert Size: 1860 bp

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: [BC017517](#), [AAH17517](#)

RefSeq Size: 2115 bp

RefSeq ORF: 1860 bp

Locus ID: 53376

UniProt ID: [O88623](#)

Cytogenetics: 9 A5.1

Gene Summary: Hydrolase that deubiquitinates polyubiquitinated target proteins such as MDM2, MDM4 and CCND1 (By similarity). Isoform 1 and isoform 2 possess both ubiquitin-specific peptidase and isopeptidase activities (By similarity). Deubiquitinates MDM2 without reversing MDM2-mediated p53/TP53 ubiquitination and thus indirectly promotes p53/TP53 degradation and limits p53 activity (By similarity). Has no deubiquitinase activity against p53/TP53 (By similarity). Prevents MDM2-mediated degradation of MDM4 (By similarity). Plays a role in the G1/S cell-cycle progression in normal and cancer cells (By similarity). Plays a role in the regulation of myogenic differentiation of embryonic muscle cells (By similarity). Regulates the circadian clock by modulating its intrinsic circadian rhythm and its capacity to respond to external cues (PubMed:23213472, PubMed:25238854, PubMed:26756164). Associates with clock proteins and deubiquitinates core clock component PER1 but does not affect its overall stability (PubMed:23213472). Regulates the nucleocytoplasmic shuttling and nuclear retention of PER1 and its repressive role on the clock transcription factors CLOCK and ARNTL/BMAL1 (PubMed:25238854).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) differs in the 5' UTR compared to variant 3. Variants 1 and 3 encode the same protein (isoform Usp2-69).