

Product datasheet for **MC224189**

Usp19 (NM_145407) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Usp19 (NM_145407) Mouse Untagged Clone
Tag: Tag Free
Symbol: Usp19
Synonyms: 8430421I07Rik; AI047774; Zmynd9
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC224189 representing NM_145407
Red=Cloning site **Blue**=ORF **Orange**=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGTCTGCAGGGCCAGTGCTACAGGGCCAGGAGGGGGCCGCCAGGACTGGAAGAGGCCACTAGTAAGA
AGAAACAGAAGGATCGAGCAAACCTGAAAAGTAAAGATGGAGATGCTAGGAGAGTGTCCCTTCTCGAAA
GGAAACCAACAAAGATGAATTGTTGCTCGATTGGAGGCAGAGTGCAGATGAGGTGATTGTTAAGCTCGC
GTGGGAACAGGTCCCGTACGCTCTGGAGGATGTAGATGCTGCGTTACAGACACGGACTGTGTGGTAGGC
TTCCAGATGGTCCGCAGTGGGGTGGTGTCTTTTCTGCTGAAATACAAAGTCTTTCACCAAAAGTGCAGGC
TCGCAAGGGTGGTCTTCTACAGCTAGTACTACCAAGAAGGTGCCTCTGCTCACGTGGCCCTCTCTCCTG
AAACCTCTGGGAACCAAGAGCTGGTGCCAGGTTTGCAGTGCCAGGAGAACGGGCAAGAGCTGTCTCCCA
TTGCCCTGGAGCCAGGCTCTGAGCCCCGAGAGCTAAACAGGAAGCCGAAACAGAAAGCGGGCCAGGG
CCGTGGT
CTCCGAGAGGGCCAGAAGGGGAAGGGTCCATGGATGGCCCGGCCCCAGGGTGTGCCCCGCTTTCC
TGCTGACTCAGTACCCAGTTGAGGCTGAGGAGAAGCTGTGCTCCACCAATGAACACTCAAACAAG
TCTCTGAGCTCAGAGAAGAGTTTAGCCCTTCTGACAGTAGAGAAGACAGTGTCCCCAGGAATGACCCA
GTCGCCCCGTTATGGTCCAGGACAGAGACCCTGAGCCTGAGCAAGAAGACCAAGTCAAAGAGGAGATGG
CACTTGGGGTGTATCCTACAGCCTTGGTGGAGGAACCAGAGTCTATGGTGAACCTGGCATTGTCAAGAA
CGACTCGTATGAGAAGGGCCGGATTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGT
TCCGAGTGTCTTCCGAGAGCAGGACTTCACTGATCTTCCAGACCAGAACTTGATTGAACCAGAGC
AGTGTACGTTCTGTTTACGGCCTCTCGAATCGATATCTGCCTCCGAAGCGGCAGAGTACGCGTGGG
GGGACTGGAGGCCCTGTACACGAGGTGCAGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGT
CCTTTGGATTCAACCCCTCCAGGAGGTGGCCCCACCCCTGACAGGCCAGGAGGAAGCCAGGGCTGTGG
AGAAGGAAAAACCAAGGCTCGATCAGAGGACTCAGGGCTGGATGGTGTGGTGGCCCGCACCCCTTGGA
GCATGTAGCCCCAAAGCCAGACCACACTTGGCCTCGCCAAACCCACGTGTATGGTGCCTCCAATGCC
CACAGTCCAGTTAGTGGGATAGTGTGGAGGAGGACGAAGAGGAAGAAGAAGGTGTGCTGCCAGGCT



TCACTGGCCTTGCAACTTAGGGAACACCTGCTTCATGAATAGCGTCATTCAAGTCTTTGTCCAACACTCG
 GGAACCTCGTGACTTCTTTACGACCGATCCTTTGAAGCTGAGATTAACAATAACCCATTGGGGACT
 GGTGGGCGCCTCGCCATTGGCTTTGCTGTGCTGCTCCGGGCCCTATGGAAGGGTACTCACCAAGCCTTTC
 AGCCCTCAAGCTAAAGGCCATTGTGGCAAGCAAGGCCAGCCAGTTCACAGGCTATGCACAGCATGATGC
 TCAAGAGTTTATGGCTTTCTTGTGGATGGGCTACATGAAGACCTCAATCGAATCCAAAACAAACCTAC
 ACAGAGACTGTGGACTCGGACGGGCGGCCGATGAGGTGGTAGCCGAGGAAGCATGGCAGCGGCACAAGA
 TGAGAAATGATTCAATTCATTGTGGACTGTTTCAGGGCCAGTACAAGTCAAAGCTGGTGTGCCCTGTGTG
 TGCCAAGTCTCCATCACTTTTGACCCGTTCTTTATCTGCCGGTACCCTTGCCACAAAAGCAAAAGGTT
 CTCCCATATTTTATTTTGGCAGGGAGCCACAGCAAGCCATCAAGTTCCTGGTGAGTGTGAGCAAGG
 AGAACTCCAGCGGAGTGAAGTGTGGACTCCCTCTCAGAGTGTCCACGTGAAGCCTGAGAACCTGCG
 CCTAGCCGAGGTAATTAAGAACCCTTCCACCGTGTTCCTTGCCTCCCACTACTGGACGCTGTGTCC
 CCCACGGACGTGCTCCTGTCTTGTGAGTGTCTCCCAAGTGGCTAAGGAGCGGGTAGTAGTGTG
 AGGTGCAGCAGCGCCCCAGGTACCCAGCATCCCTATCTCAAGTGCAGCAGCTGCCAGCGGAAGCAGCA
 ATCAGAAGAAGAAAAGCTGAAGCGCTGTACCCGTTGCTACCGTGTGGGCTACTGCAACCAGTTCTGCCAG
 AAAACCCATTGGCCTGACCACAAAGCCCTGTGCCGCCCTGAGAACATTGGCTACCCCTTCTGGTCAAGT
 TGCTGTCTCACGCTCACTTATGCCCGTCTTGTCTCAGCTACTAGAAGGTTATGCCCGGACTCTGTGAG
 TGTATTCCAACCGCCCTCCAGCCTGGCCGATGGCTTTGGAATCGCAGAGCCCTGGCTGTACCAGTTG
 CTTTCAACCAGCTCTCTGGAGGCTGGGGACAGTAAAAGAGAACCATTACGCCTTCTGAGCTCCAGCTGG
 TGACCCCTGTGGCTGAAGGGGATACAGGGGCTCACCGAGTATGGCCGCTGCTGATAGGGGTCTGTGCC
 TAGCACCAGTGGACTCTCTTCTGAGATGCTGGCCAGTGGGCTATCGAAGGTTGTCCCTTGTCTGCTGGT
 GAGAGGGTATCTCGCCCTGAAGCTGTGTGCTGGGTACCAACTCAAGTGAATCTGTGAATACCCACA
 CGCCCCAGTCTTCATCTATAAAATTGATGCATCAAACCGTGAAGCAGCGGCTGGAGGACAAAGGGGAGAC
 ACCATTGGAGCTAGGTGATGACTGTAGCCTGGCTCTGGTGTGGCGAACAATGAACGCCTGCAGGAGTTT
 GTGTTGGTAGCCTCCAAGGAGCTGGAATGTGCTGAAGATCCAGGCTCTGCTGGTGAGGCTGCCCGTCTG
 GCCACTTACCCTGGACAGTGCCTCAACCTCTTTACACGGCCTGAAGTGTGGCACCTGAGGAGGCTG
 GTACTGCCACAGTGCAAACAGCATCGTGAAGCCTCAAACAGCTGCTGTTGTGGCGCCTACCGAACGTG
 CTGATTGTGCAGCTCAAGCGCTTCTCTTTCTGAGTTTCAATTTGGCGAGACAAGTCAATGACTTGGTGG
 AGTTTCTGTTTCGGAACCTGGACTTGAAGCAAGTCTGTATCGGTGAGAAAGAGGAGCAGCTGCCTAGCTA
 TGACCTGTATGCTGTATCAACCACTACGGAGGCATGATCGGTGGCCACTATACTGCTTGTGCACGGCTG
 CCCAATGATCGCAGTAGCCAGCGCAGTACGCTGGGCTGGCGCTTGTGATGACAGCAGGTGACAAACAG
 TAGACGAAAGCCAGGTGCTGACGCGCTATGCCATGTTCTTCTACCGTGTGCGAAGTCTCCTGTGGA
 GAGACCCCGCAGGCAAGTCACTCTGAACACCACCCAGACCTAGGCCCTGCAGCTGAGGCTGCTGCCAGC
 CAGGGACTAGGCCCTGGCCAGGCCCCGAGGTGGCCCCACGCGGACAGCCCTGAACGCTTCCGCCCC
 CTGTGGACCGCCAGCCCCACGTACAGCAACATGGAGGAGGTCGATTAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM_145407
- Insert Size:** 3900 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: [NM_145407.3](#), [NP_663382.2](#)

RefSeq Size: 4653 bp

RefSeq ORF: 3900 bp

Locus ID: 71472

UniProt ID: [Q3UJD6](#)

Cytogenetics: 9 F2

Gene Summary: Deubiquitinating enzyme that regulates the degradation of various proteins. Deubiquitinates and prevents proteasomal degradation of RNF123 which in turn stimulates CDKN1B ubiquitin-dependent degradation thereby playing a role in cell proliferation. Involved in decreased protein synthesis in atrophying skeletal muscle. Modulates transcription of major myofibrillar proteins. Also involved in turnover of endoplasmic-reticulum-associated degradation (ERAD) substrates (By similarity). Regulates the stability of BIRC2/c-IAP1 and BIRC3/c-IAP2 by preventing their ubiquitination. Required for cells to mount an appropriate response to hypoxia and rescues HIF1A from degradation in a non-catalytic manner. Exhibits a preference towards 'Lys-63'-linked ubiquitin chains (By similarity). Plays an important role in 17 beta-estradiol (E2)-inhibited myogenesis. Decreases the levels of ubiquitinated proteins during skeletal muscle formation and acts to repress myogenesis.[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (5) lacks an exon in the middle coding region and has an alternate 3' exon compared to variant 1. The resulting isoform (5) lacks an internal segment and has a different and shorter C-terminus, as compared to isoform 1.