

Product datasheet for **MG226430**

Usp19 (NM_145407) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Usp19 (NM_145407) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Usp19
Synonyms:	8430421I07Rik; AI047774; Zmynd9
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG226430 representing NM_145407 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCTGCAGGGGCCAGTGTCTACAGGGCCAGGAGGGGGCCAGGACTGGAAGAGGCCACTAGTAAGA
AGAAACAGAAGGATCGAGCAAACCTGGAAAGTAAAGATGGAGATGCTAGGAGAGTGTCCCTTCCTCGAAA
GGAACCAACCAAGATGAATTGTTGCTCGATTGGAGCCAGAGTGCAGATGAGGTGATTGTTAAGCTGCGC
GTGGGAACAGGTCCCGTACGTCTGGAGGATGTAGATGCTGCGTTCACAGACACGGACTGTGTGGTGAGGC
TTCCAGATGGTTCGCGAGTGGGTGGTGTCTTTGCTGAAATACAAAGTCTTGCACCAAGTGCAGGC
TCGCAAGGGTGGTCTTACAGCTAGTACTACCAAGAAGGTGCCTCTGCTCACGTGGCCCTCTCTCCTG
AAACCTCTGGGAACCAAGAGCTGGTGCCAGGTTTGAGTGCAGGAGAACGGGCAAGAGCTGTCTCCCA
TTGCCCTGGAGCCAGGCTCTGAGCCCCGACAGCTAAACAGGAAGCCGAAACAGAAAGCGGGCCAGGG
CCGTGGTGGAGTGGTCTCGGGGCTGGCCCTGGGACACAGGCAGGGCCAGCGCAAGAGGGCTGTTTAC
CTCCGACAGGGCCAGAAGGGGAAGGTCATGGATGGCCCCGGCCCCAGGGTGTGCCCCGTCTTTCC
TGTCTGACTCAGTACCCAGGTTGAGGCTGAGGAGAAGCTCTGTGCTCCACCAATGAACACTCAAACAAG
TCTCTTGAGCTCAGAGAAGAGTTTAGCCCTTCTGACAGTAGAGAAGACAGTGTCCCCAGGAATGACCCA
GTCGCCCGGTTATGGTCCAGGACAGAGACCCTGAGCCTGAGCAAGAAGACCAAGTCAAAGAGGAGATGG
CACTTGGGGCTGATCCTACAGCCTTGGTGGAGGAACCAGAGTCTATGGTGAACCTGGCATTGTCAAGAA
CGACTCGTATGAGAAGGGCCCGATTGGTGGTGCACGTGTACGTGAAGGAGATCCGACAGGGACAGC
TCCCGAGTGTCTTCCGAGAGCAGGACTTCACTGATCTTCCAGACCAGAACTTGATTGAACCAGAGC
AGTGTACGTTCTGTTTACGGCCTCTCGAATCGATATCTGCCTCCGGAAGCGGCAGAGTACGCGTGGGG
GGGACTGGAGGCCCTGTACACGAGGTGCAGTGGGTGGTCAAAGGTTGCCGTGCCACAGGCCCAACC
CCTTTGGATTCAACCCCTCCAGGAGGTGGCCCCACCCCTGACAGGCCAGGAGGAAGCCAGGGCTGTGG
AGAAGGAAAAACCAAGGCTCGATCAGAGGACTCAGGGCTGGATGGTGTGGTGGCCCGCACCCCTTGG
GCATGTAGCCCCAAAGCCAGACCACACTTGGCCTCGCCAAACCACGTGTATGGTGCCTCCAATGCC



[View online »](#)

CACAGTCCAGTTAGTGGGGATAGTGTGGAGGAGGACGAAGAGGAAGAGAAGAAGGTGTGCCTGCCAGGCT
TCACTGGCCTTGTCAACTTAGGGAAACACCTGCTTCATGAATAGCGTCATTCAAGTCTTTGTCCAACACTCG
GGAAGTTCGTGACTTCTTTCACGACCGATCCTTTGAAGCTGAGATTAACAATAACCCATTGGGGACT
GGTGGGCGCCTCGCCATTGGCTTTGCTGTGCTGCTCCGGGCCCTATGGAAGGGTACTCACCAAGCCTTTC
AGCCCTCCAAGCTAAAGGCCATTGTGGCAAGCAAGGCCAGCCAGTTCACAGGCTATGCACAGCATGATGC
TCAAGAGTTCATGGCTTCTTGTGGATGGGCTACATGAAGACCTCAATCGAATCCAAAAACAAACCTAC
ACAGAGACTGTGGACTCGGACGGGCGGCCGATGAGGTGGTAGCCGAGGAAGCATGGCAGCGGCACAAGA
TGAGAAAATGATTCAATTCATTGTGGACCTGTTTCAGGGCCAGTACAAGTCAAAGCTGGTGTGCCCTGTGTG
TGCCAAGGTCTCCATCACTTTTGACCCGTTCTTTATCTGCCGGTACCCTTGCCAAAAAGCAAAAAGGTT
CTCCCCATATTTATTTTGGCAGGGAGCCCCACAGCAAGCCCATCAAGTTCCTGGTGAAGTGCAGCAAGG
AGAAGTCCAGCGGAGTGAAGTGTGGACTCCCTCTCAGAGTGTCCACGTGAAGCCTGAGAACCTGCG
CCTAGCCGAGGTAATTAAGAACCCTTCCACCGTGTCTTCTGCCCTCCCACTACTGGACGCTGTGTCC
CCCACGGACGTGCTCCTGCTTTGAGCTGCTCTCCCAGAACTGGCTAAGGAGCGGGTAGTAGTGTG
AGGTGCAGCAGCGCCCCAGGTACCCAGCATCCCTATCTCAAGTGCCGAGCCTGCCAGCGGAAGCAGCA
ATCAGAAGAAGAAAAGCTGAAGCGCTGTACCCGTTGCTACCGTGTGGGCTACTGCAACCAGTTCTGCCAG
AAAACCCATTGGCCTGACCACAAAGGCCTCTGCCGCCCTGAGAACATTGGCTACCCTTCTGGTCAAGT
TGCCCTGCTTACGCCCTCACTTATGCCCGTCTTGTCTCAGCTACTAGAAGGTTATGCCCGGACTCTGTGAG
TGATTCCAACCGCCCTTCCAGCCTGGCCGCATGGCTTTGGAATCGCAGAGCCCTGGCTGTACCAGTGTG
CTTTCAACCAGCTCTCTGGAGGCTGGGGACAGTAAAAGAGAACCATTACGCCTTCTGAGCTCCAGCTGG
TGACCCCTGTGGCTGAAGGGGATACAGGGGCTCACCGAGTATGGCCGCTGCTGATAGGGGCTCTGTGCC
TAGCACCAGTGGACTCTTCTGAGATGCTGGCCAGTGGCCCTATCGAAGGTTGTCCCTTGTGCTGGT
GAGAGGGTATCTCGCCCTGAAGCTGCTGTGCCCTGGTACCAACTCAAGTGAATCTGTGAATACCCACA
CGCCCCAGTTCCTCATCTATAAAATTGATGCATCAAACCGTGAGCAGCGGCTGGAGGACAAAGGGGAGAC
ACCATTGGAGCTAGGTGATGACTGTAGCCTGGCTCTGGTGTGGCGAACAATGAACGCCTGCAGGAGTTT
GTGTTGGTAGCCTCCAAGGAGCTGGAATGTGCTGAAGATCCAGGCTCTGCTGGTGAAGGCTGCCCGTGTG
GCCACTTACCCTGGACCAGTGCCTCAACCTCTTTACACGGCCTGAAGTGTGGCACCTGAGGAGGCCTG
GTACTGCCACAGTGCAAACAGCATCGTGAGGCCTCAAACAGCTGCTGTTGTGGCGCCTACCGAACGTG
CTGATTGTGCAGCTCAAGCGTCTCTCTTTCGTAGTTTCATTTGGCGAGACAAGATCAATGACTTGGTGG
AGTTTCTGTTCCGAACCTGGACTTGAAGCAAGTCTGTATCGGTGAGAAAGAGGAGCAGCTGCCTAGCTA
TGACCTGTATGCTGTATCAACCACTACGGAGGCATGATCGGTGGCCACTATACTGCTTGTGCACGGCTG
CCCAATGATCGCAGTAGCCAGCGCAGTACGCTGGGCTGGCGCTTGTGTTGATGACAGCAGGCTGACAACAG
TAGACGAAAGCCAGGTCTGACGCGCTATGCCTATGTTCTCTTCTACCGTCGTCGGAACCTCCTGTGGA
GAGACCCCCAGGGCAAGTCACTCTGAACACCACCCAGACCTAGGCCCTGCAGCTGAGGCTGCTGCCAGC
CAGGGACTAGGCCCTGGCCAGGCCCCCGAGGTGGCCCCACGCGGACAGCCCTGAACGCTTCGCCCCCC
CTGTGGACCGCCAGCCCCACGTACAGCAACATGGAGGAGGTCGAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG226430 representing NM_145407
 Red=Cloning site Green=Tags(s)

MSAGASATGPRRGPPGLEEATSKKKQKDRANLESKDGDARRVSLPRKEPTKDELLEDWRQSADEVIVKLR
 VGTGPVRLLEDVDAFTDTCVRLPDGRQWGGVFFAEIQSSCTKVQARKGGLLQLVLPKKVPLLTPWSLL
 KPLGTQELVPLGQCQENGQELSPIALEPGSEPRRAKQEARNQKRAQGRGEVSGAGPGTQAGPSAKRAVH
 LRRGPEGEGSMDGPGPQGDAPSFLSDSATQVEAEEKLCAPPMTQTSLLSSEKSLALLTVEKTVSPRNDP
 VAPVMVQDRDPEPEQEDQVKEEMALGADPTALVEEPESMVNLAFLVKNDSYEKGPDSVVVHVYVKEIRRDS
 SRVLFREQDFTLIFQTRNLIIEPEQCTFCFTASRIDICLRKRQSQRWGGLLEAPATRGAVGGAKVAVPTGPT
 PLDSTPPGGGPHPLTGQEEARAVEKEKPKARSEDGLDGVVARTPLEHVAPKPDPHLASPKPTCMVPPMP
 HSPVSGDSVEDEEEKVKVCLPGFTGLVNLGNTCFMNSVIQSLNTRERLDFFHDRSFEAEINYNPLGT
 GGRLAIGFAVLLRALWKGTHQAFQPSKKAIVASKASQFTGYAQHDAQEFMAFLDLGHEDLNRIQNKPY
 TETVDSGRPDVVAEEAWQRHKMRNDSFIVDLFQGGYKSKLVCPVCAKVSITFDPLVLPVPLPQKQKV
 LPIFYFAREPHSKPIKFLVSVSKENSSASEVLDSLQSVHVKPENLRLAEVIKRFHRVFLPSHSLDAVS
 PTDVLLCFELLSPELAKERVVLEVQRPQVPSIPI SKCAACQRKQQSEEEKLKRCTRCYRVGYCNQFCQ
 KTHWPDHKGLCRPENIGYPFLVSPASRLTYARLAQLLEGYARYSVSVFPFPQGRMALESQSPGCTTL
 LSTSSLEAGDSEREPIQPSLQLVTPVAEGDTGAHRVWPPADRGPVSTSGLSSEMLASGPIEGCPLL
 ERVSRPEAAVPGYQHSSESVNTHTPQFFIYKIDASNREQLEDKGETPLELGDDCSLALVWRNNERLQEF
 VLVASKELECAEDPGSAGEAARAGHFTLDQCLNLFTRPEVLAPEEAWYCPQCKQHREASKQLLWRLPNV
 LIVQLKRF SFRSFIWRDKINDLVEFPVRNLDL SKFCIGQKEEQ LPSYDL YAVINHYGGMIGGHTACARL
 PNDRSSQRSDVGWRLFDDSTVTTVDESQVVTRYAYVLFYRRRNSPVERPPRASHSEHPDLGPAEAAAAS
 QLGPGQAPEVAPTRTAPERFAPPVDRPAPTYSNMEEVD

TRTRPLE - GFP Tag - V

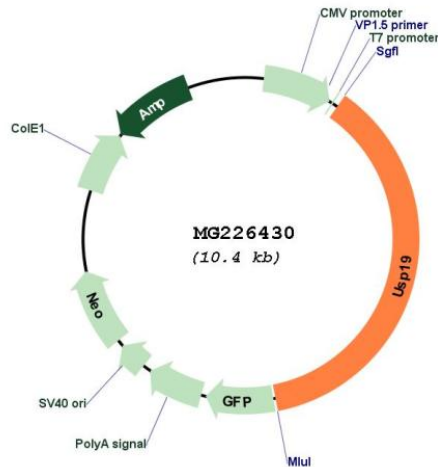
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_145407

ORF Size: 3897 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_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]