

Product datasheet for **MG210833**

Usp16 (NM_024258) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Usp16 (NM_024258) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Usp16
Synonyms:	1200004E02Rik; 2810483I07Rik; 6330514E22Rik; UBPM
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG210833 representing NM_024258
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGGGAAGAAACGGACCAAGGGGAGAAGTGCTCCAGACACGGTGGCCTCAGAGTCTGCAGAACCAGTGT
 GCAGACACCTTAGAAAAGGGTTGGAACAAGGTAATTTGAAAAAGCTTTAGTAAATGTGGAGTGGAAAT
 CTGCCAAGACTGTAAAGACTGACAATAAAGTGAAAGATAAACCTGAGGAGGAAGCAGAAGACCTTCGGTT
 TGGCTCTGTCTTAAATGTGGCCATCAGGGCTGTGGCAGAGATTCTCAGGAGCAGCATGCCTGAAGCACT
 ACACGACACCGAGATCCGAGCCTCACTACCTGGTGTCTGAGTCTGGACAACCTGGAGCGTCTGGTGTACAA
 GTGTGACGAGGAAGTCAAGTACTGTAGCTCAAACCGATTGGGCCAAGTGGTTGATTATGTTAGAAAAACA
 GCTGGCGTAAGAAGTTCAAAACAGCAGAGAAAAATAATGGACACATTGAGCTCGAAAAATAAAAAATTGG
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 TGTCACCTCTCCAATCTTGTCTTACCGTGACATTCACAAGATTGTGAAATGGAATCAACCAAGGGC
 AGTGGTTTCACATCAGCGATACACATGTGCAAGCTGTGCCTATAACTAAAGTACTGAACTACAAGCATA
 TCTCTATTTTATGAGAGAATACTG

ACCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG210833 representing NM_024258
 Red=Cloning site Green=Tags(s)

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MGKKRTKGRSAPDTVASESAEPVCRHLRKGLEQGNLKKALVNVEWNICQDCKTDNKVKDKPEEEAEDPSV
WLCLCKGHQCGRDSQEQHALKHYYTTPRSEPHYLVLSDNWSVWCYKCDDEEVKYCSSNRLGQVVDYVRKQ
AGVRTSKPAEKNNGHIELENKLEKESKNEQEKEKSENKAKETIPMDSASQITVKGLSNLGNTCFFNAVM
QNLSTPVLRELLKEVKMSGTIVKIEPPDLALTEPLEVNLEPPGPLTLAMSQFLSEMQENKKRVVTPKEL
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PSFVDRIFFGGELTSTIMCDECRVSLVHESFLDLPLVLDQSGKKSINDKNVMTMEEDKDSEEEKDD
SYMKSRSDLPSGTSKHLQKAKKQAKKQAKNQRQKQIQRFLHFNELCATDYTEDNEREADTALAGEVE
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TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

Cloning Scheme:

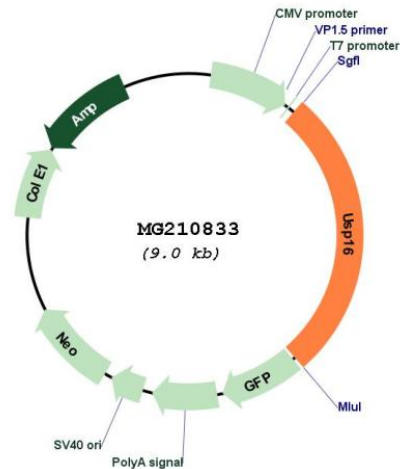
Cloning sites used for ORF Shutting:



EcoRI BamHI KpnI RBS Kozac Consensus SgfI AscI
 CTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGSAGATCTGCCGCCGATCGCCGGCGCCAGATCT

 HindIII NheI RsrII MluI NotI XhoI GFP Tag
 CAAGCTTAACTAGCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC --- ---
 T R T R P L E M E S D - - -

 PmeI FseI
 --- GAA GAA AGA GTT TAA ACGGCCGGCCGGGAGCT
 - - E E R V Stop

Plasmid Map:


ACCN: NM_024258

ORF Size: 2475 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_024258.1](#), [NP_077220.1](#)

RefSeq Size: 2926 bp

RefSeq ORF: 2478 bp

Locus ID: 74112

UniProt ID: [Q99LG0](#)

Cytogenetics: 16 C3.3

Gene Summary: Specifically deubiquitinates 'Lys-120' of histone H2A (H2AK119Ub), a specific tag for epigenetic transcriptional repression, thereby acting as a coactivator. Deubiquitination of histone H2A is a prerequisite for subsequent phosphorylation at 'Ser-11' of histone H3 (H3S10ph), and is required for chromosome segregation when cells enter into mitosis. In resting B- and T-lymphocytes, phosphorylation by AURKB leads to enhance its activity, thereby maintaining transcription in resting lymphocytes (PubMed:24034696). Regulates Hox gene expression via histone H2A deubiquitination. Prefers nucleosomal substrates. Does not deubiquitinate histone H2B.[UniProtKB/Swiss-Prot Function]