

Product datasheet for **MG224465**

Magel2 (NM_013779) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Magel2 (NM_013779) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Magel2
Synonyms:	Mage-l2; NDNL1; nM15; ns7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG224465 representing NM_013779, codon optimized. Due to the complexity of NM_013779, the ORF clone is codon optimized for mammalian Expression. The nucleotide sequence differs from the reference sequence, yet the amino acid sequence remains identical.

Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGC**

ATGTCCCAGCTTTCCACCAACCTGGGTGATTCATCACCTCCGGAATCACCAGTGCCCGCAGTCCACTCCA
GGCCACAGTACTGATGCGGGCTCCTCCCGCTAGTTCAAGGGCTCCTCCTGTCCCGTGGGATCCTCCCC
CGTTGATCTCCAGGCCCTATGGCTGCATGGCAGGCCCCAGCCAGCATGGGAAGCTCCGGAGGGTCAG
CTGCCTGCGCCTGTGCCCCAGCTGGCTCAGCCTCCAGGGCTGGGCGCACCTATGGTTTCAGGCGCCCCCTC
TGGGTGGCGGCATGGCTAAACCACTACTCCAGGAGTCTGATGGTGCACCAAGCCACCCCTGGCGCGCC
TATGGCTCAGTCAAGCAGCCCGCGTGTGCTGCTGCACCTTCTGTGACTGGCGCCCCCTGGCTCAC
CCCCCCCCACCGGTACCCCATGACACACCCACCCGGGACATCCATGGCCATCCCCCTCTCTCCGC
CACCTCCGCTCCCCCCCCACCTCCGGGACACCCATGACTACCCACCTCCTCCGGGAACACCTATGGG
ACACACCCCCACCGGAAATCCGATGACCCACCCCTCCTGGCAATCCTATGGTTACCCCCCTCAC
CATGGCGCGCCTATGGTGCATGGAGTCCCCATGGGACTCCTATGCCACATGTGCCATCACGGGACCC
CTATTGCTCAGCAACCGACACCCGGTGTCTGATGGCGCAGCAGCTTACTCCCGAGTGCTCATGGTGCA
GCCTCCTGCTCCTGGAGCAACATGGTGCAGCCCCCTCAGGCTGCCCTCATGACCAACAGCCCCA
AGTATAACACCAATGGCAAAGCCTCCTGGACCCGGCGTGGTAATGATACATCCTCCAGGCGCTCAGAGCC
CCATTATTCAGACACCCGTATCCGGCGCTCCTATGGCTCAAACCGTGCTCCCCCGGGTCAGCCTTTGGC
CACTTGGGCACCAAGGCCAGCCCTCATCTGCAGATCCAAAGCCAGGTCATCCGCGCCCCCTCAG
GTGCCAGCGTCCCCAGGCACCTCAGGTTAGCTTGCCACACCTCCTGGATGGCAGGCGACAACGCCAA



[View online »](#)

ATTGGCAGGTCACCCCCAGGGATGGCCGGCTACTCCTCTGACGTGGCAGGCAACACAAGTGACCTGGCA
 GGCGCCAAACCATTCATGGCAGGCCACACAGCCAGGCAGGCGGCACTCCACAATCAGGACAGGGCAT
 ACACCCATCCGCCAGGCCCCGACCGCTCCTGCGGCAGATCCCGCCTATGATCAGGCAAATTCAGCCCG
 TCATGAGGCAGGCCCCCACTTATTCGCCAGGTGCCAATCCGCCCGCGCCACATGGGATCGCCAGCCA
 GCCTCAGCTGTGGCAGGTGCTCCCTCCACCACCACCTTGCGGCAGGCCCCCAGGCACGGCTTCTCCTT
 CCACGAGTGCCCGGTACGGGGCAGGTGAGCAGGTCCTCCTGTTGCCAGATTACCTGGTGCCCCAAA
 GCGGACCACAGGTTCCCAAACAGTGCTGCCAGCCAGCTTAGTATTCATCCCTGTACCCCAAGCAGC
 CGCCAGTCCGCCCGCCGCACTGTGCATTGCCCGCGATCATTTGGCAAGCTCCCAAAGGTCAGGCTCCC
 GTCCCTCAGGAATTCCCGTGCCACAAGAGCTGCCAGTACCCAGGAGCTGCCCGTTCCCGAGGAGTGC
 CAGTTCCACAGGAGATCCCGTGCTCAGGAGATCCAGTTTCTCAGGAAGTCCAGTACCCCAAGAACT
 TCCGGTGCTCAGGAGCTGCCGGTGCTCAAGAGCTGCCTGTCCACAGGAATTCCTGTCCCTCAGGAG
 CTGCCAGTGCCACAGGAGCTGCCGTACCACAGGAGCTGCCAGTCCCACTGGAGTTCCAGGAGGTCAAC
 AGGCTCAGGCAGTCGGATGGCGCGCTCTAAAGTCCACCCCACTTTTGGCAGCCTGTGAGCGCACAAGA
 GGCCAGGAACAAGCAACCCAGATTGCGCAGTGGAACAACAGCAGCCTTCCAGGGAGCCCCCGCATCC
 TCTAAAGCGCTGCAAACCAACTCCCACTCACAAGCCAGGCTCCGGCTCCAGGCGGAGCTGCCTT
 CCGTGACGTGCAACCCAGCTGGCAGGGTCTCTGCCCATGTTGCAGGCCAGCCCGGGGCTTCAGCAAC
 CCTTGCTAACTTTCTAGGGGCTCCACCAGAAGCAGAATGGCCCCAAGCGGTGAACCGGGTCCATCTTCC
 CTTGAGCCGCGGGGACCCCAAGAGAACGGCGAGCACCCGCCCGCAGAAAAAGGGCCCTCCGAAAGAAA
 GGATGTTTCATCGAGCGACCTTTTGTGCCCCAGGGGCGCAAGCGCTCCCGCGCATACGTGCCAACGGC
 ATGGAAGAATCTCCCTGTACCAGCGAAACCTTCCCGGCCACAAGCAGGGTATTCCTTCCACAAGTCAC
 TTTAGCCCGCTCATCTAATGCCTTTCGCGGTCTAGCGCCGCTAGTGAGTCTCCTAAAAGCTTGCCCT
 TTGCACTGCAGGATCCCTACGCTGTGTGAAGCCCTCCCGCGGTGCCGTGGGTCCCTTATCCCGACGG
 CAACGCTAGTTCTGCATGCAAAATCCGTCCAGCAATACTGATGGTGCCGCTGCTGCCCGCAGGCATCT
 GCTACGGCCGCGGAAGCTCTAAGAGCTTGAGCCCCCTCGGCGGCCCGCAAGGCTACAAGGAAGAAGA
 AGCATCTGGAGCCAAAGGAGGACAACCTGTGGACATAGGCTGAGTAGCAGAGACTGGAGAGTCCCGCAC
 ATGGGGCAATCTAGTCACAGCGACTGGGAAATCCAACGCGCAATGCAACTGCTCGGGGACCGGAGTCA
 TTGTATACCCCTCAGGGCTCAACGATTGGGGCTGTCAAATACCAGCCGATGCCAAGATCCTTGAAG
 GACCCAGCACCTCCCGGATCAGGAGTTCTGCGGCGATTCTGGGGGAGTCAAACATGGATGGCTTCTGA
 AGTTCTAGCGTATCCAGAGGCTCCTCTGCGGCACAAGAAGATCCTGACCGGAGAGCCAGCCACTGAGT
 CCCCTGGATGAAAGAGCTAATGCTCTCGTGCAATTTCTGTTGGTTAAGGACCAGGCTAAGGTTCCGGTGC
 AGCTCAGTGAGATGGTCAATGTGGTCATCCGGGAGTACAAGGACGACTACTGGACATCATCAACCGCGC
 CAATACGAAACTCGAATGCACATTCCGGGTGTCAACTCAAGGAGGTTGATACCAAAACGCACACTTACATC
 ATAGTTAATAAGATGGCCTACCCACAGTGCAACCTGTTGGCTTCTATCTGGAACGCCCTAAATTTAGCC
 TCCTGATGGTGGTCTGTCACTCATTTTCATGAAGGGATATTGTATTGCGGAGAATCTGCTCTTACGCTT
 TCTGTTCCAGCTGGGTCTGGATGTACAAGAGACAAGCGGACTCTTTCGAATTACAAGAACTGATTACT
 AGCGTCTTTGTACGGCATCGATACCTGGAGTACCGACAGATCCCTTTACTGAGCCTGCTGAGTACGAGC
 TTCTCTGGGGCCCCGAGCGTTTTTGGAGACTAACAGAGTGACATTCTGAGATTTTGGCGGCGCTTTA
 CGAAAAACAACCTCAAATATGGTCATGTACGTACCTGGACAGCCTCGCCGAGTTGGAATACAAGGACGCG
 AACGCCGACGTGAGGAGAGCCATGATTCAGACGACGATGCACACGACCCACATCCTCCCTCACCCCC
 AC

ACGCGTACGCGGCGCTCGAG – GFP Tag – GTTTAA

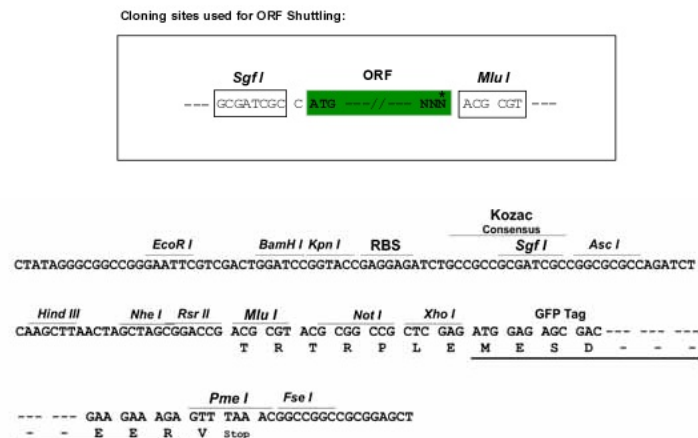
Protein Sequence: >MG224465 representing NM_013779
 Red=Cloning site Green=Tags(s)

MSQLSTNLGDSSPPESPVPAVHSRPTVLMRAPPASSRAPPPVWDPPPVDLQAPMAAWQAPQPAWEAPEGQ
 LPAPVAQLAQPPLGAPMVQAPPLGGMAKPTPGVLMVHQPPGAPMAQSSTPGVLMHPSVTGAPLAH
 PPPPGTMTHTPGTSMHPPPPPPPPPPPPPGTMTHTPPPGTSMGHHPPPGNPMTHPPPGNPMVHPLT
 HGAPMVHGGPHGTMPHVPITGTPIAQQTTPGVLMVQQLTPGVLMVQPPAPGAPMVQPPQAALMTQPAP
 SITPMAKPPGPGVMIHPPGARGPIIQTTPVSGAPMAQTVLPPGQPLATWAPQGQPLILQIQSQVIRAPPQ
 VPSVPQAPQVQLATPPGQWQATTPNWQVTPQGWPAATPLTWQATQVTWQAPTIAWQATQPGRQGHSTIRTGH
 TPIRPGAPALLRQIPPMIRQIQPVMRQAPPLIRQVPIRPAPHGIASQPQLWQVLPPLRQAPQARLLL
 PRVPGTGQVSTVPPVAQIHLVPQSGPQVPQTVLPAQLSIPVQAAAQSAVRTVHCPIIHWQAPKQAP
 VPQELPVPQELPVPQELPVPQELPVPQELPVPQELPVPQELPVPQELPVPQELPVPQELPVPQELPVPQEL
 LPVPQELPVPQELPVPQELPVPQELPVPQELPVPQELPVPQELPVPQELPVPQELPVPQELPVPQELPVPQEL
 SKALQTLPTHQAQASGLQAEPLSVQLQPSWQGLPMLQAQPGASATLANFPRGSTRSRMAPSGEPGPSS
 LEPRGPPRRRAPARDKKGPPKERMFIGATFCAPRGASASRAYVPTAWKNLPATSETFPATSRVFPSTSH
 FQPASSNAFRGPSAAASESPKSLPFALQDPYACVEALPAVPWVPYPDGNASSACKSVPAILMVAAAAPQAS
 ATAAEASKSSEP RRRPGKATRKKKHLEPKEDNCGHRLSSRDWRGPRTWGNPSHSDWEIQRAMQLLDRES
 LYTPQGLNDWGCNTPSRMPRSLEGPSTSRDQEF CGDSGGSQTWMASEVPSVSRGSSAAQEDPDRESQPLS
 PLDERANALVQFLLVKDQAKVPVQLSEMVNVVIREYKDDSLDIINRANTKLECTFGCQLKEVDTKHTYI
 IVNKMAYPQC�LLASYLERPKFSLLMVVLSLIFMKGYCIRENLLFSFLFQLGLDVQETSGLFRTIKKLIT
 SVFVRHRYLEYRQIPFTEPAEYELLWGPRAFLETNRVHILRFLAALYENQPIWSCQYLDLSAELEYKDA
 NAAAEESHSDDDAHDPTSSPHPH

TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:

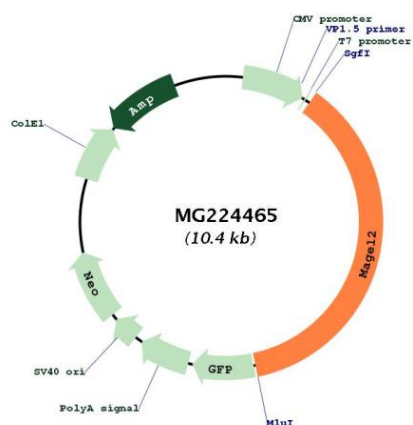


ACCN: NM_013779

ORF Size: 3852 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_013779.2 , NP_038807.4
RefSeq Size:	4662 bp
RefSeq ORF:	3855 bp
Locus ID:	27385
UniProt ID:	Q9QZ04
Cytogenetics:	7 34.37 cM
Gene Summary:	Probably enhances ubiquitin ligase activity of RING-type zinc finger-containing E3 ubiquitin-protein ligases, possibly through recruitment and/or stabilization of the Ubl-conjugating enzyme (E2) at the E3:substrate complex. Acts as a regulator of retrograde transport via its interaction with VPS35. Recruited to retromer-containing endosomes and promotes the formation of 'Lys-63'-linked polyubiquitin chains at 'Lys-220' of WASHC1 together with TRIM27, leading to promote endosomal F-actin assembly (By similarity). Regulates the circadian clock by repressing the transcriptional activator activity of the CLOCK-ARNTL/BMAL1 heterodimer. Significantly promotes the cytoplasmic accumulation of CLOCK (PubMed:22208286).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG224465