

## Product datasheet for MR205346

### Mul1 (NM\_026689) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Mul1 (NM_026689) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mul1
Synonyms:	0610009K11Rik; AV000801; Gide
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR205346 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAGAGCGGTTGCGGACCGTCTGCTCGGCCAGGTCATCCTGCTGGGCACCAGTTCGATGGTCACCGCCG  
TACTGTACTCCATATACCGGCAGAAGGCCAGGTCGCGCAGGAACAAGGGAGCTAAGAAGATTCATCT  
GGGTGAAGATTTAAAGGGCATTCTTTCAGAAGCACCGGGGAAGTGTGTGCCTTACGCTGTCATCGAAGGA  
GCTGTGCGGTCTGTTAAAGAACTCAACAGCCAGTTCGTGGAAAAGTCAAGGGGTGATCCAGCGGC  
TGTCGCTTCAGGAGCATAAGATGGTGTGGAACCGAACTACCCACCTTTGGAATGACTATTCCAAGATCAT  
TCACCAGAGGACTAACACTGTGCCCTTTGACCTCGTGCCACAGGACGGCGTGGCTGTGTCCGTGCGA  
GTGCTGAAGCCCCTGGATTCAAGTGGATCTGGGCCCTAGAGACCGTGTACGAGAAGTTCACCCCTCTGTGC  
AGTCTTCACCGATGCCATTGGCCACTACATCAGTGGCGAGAGGCCAAAGGCATCCAGGAGACAGAGGA  
GATGCTGAAGGTGGGAGCCACCCTCACGGGATCGGTGAAGTGGTCTGGACAACAACGCTGTCCGCTG  
CAGCCCCCAAGCAGGGCATGCAGTACTACCTGAGCAGCCAGGACTTTGACAGCCTGTGCACAGGCAGG  
AGTCTAGTGTCCGGCTCTGGAAGTTCTGGTCTGGTGTTCGGCTTTGCTACCTGTGCCACCCTCTTCTT  
CATCCTGAGGAAGCAGTACCTTCATCGGCAGGAGCGCTGCGCCAGCAGCAGCTCCAGGAAGAGTTCCCTT  
GAACACGAGGCCAGCTGCTGAGTCAAGCCTCGCCTGAGGACAGGAGAGTCTGAAGAGCGCTGTGTTG  
TGTGTCTGAGCAACTCAAGTCTGTGTCTTCTCGAGTGGGGCATGTGTGTTCCGCCAGTGTGTTA  
CCTTGCCCTTGCCAGGCCAAGAGGTGCCGATCTGTGCGCGGGAGATCACCGGGTGTACCCCTTGAT  
AACAGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTAA



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**Protein Sequence:** >MR205346 protein sequence  
Red=Cloning site Green=Tags(s)

MESGSRPSLGGQVILLGTSSMVTAVLYSIYRQAQVAQELKGAKKIHLGEDLKGILSEAPGKCVPIAVIEG  
 AVRSVKETLNSQFVENCKGVIQRLSLQEHKMVWNRTHLWINDYSKIIHQRTNTVPFDLVPHEGVAVSVR  
 VLKPLDSVDLGLLETVYEKFHPSVQSFTDAIGHYISGERPKGIQETEEMLVKVGATLTGIGELVLDNNVRL  
 QPPKQGMQYYLSSQDFDLSLLHRQESSVRLWKVLVLFVGFATCATLFFILRKQYLHRQERLRQQQLQEEFL  
 EHEAQLLSQASPEDRESLKSACVVCLSNFKSCVFLECGHVCSCRQCYLALPEPKRCPICRREITRVIPLY  
 NS

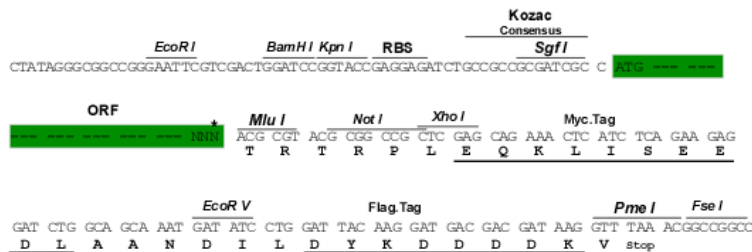
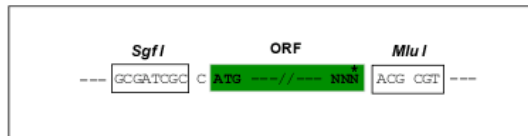
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_026689

**ORF Size:** 1059 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\\_026689.1](#), [NM\\_026689.2](#), [NM\\_026689.3](#), [NP\\_080965.2](#)

**RefSeq Size:** 3732 bp

**RefSeq ORF:** 1059 bp

**Locus ID:** 68350

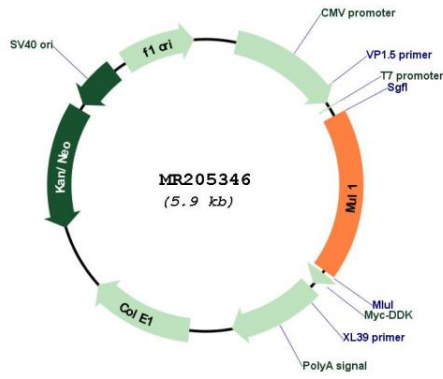
**UniProt ID:** [Q8VCM5](#)

**Cytogenetics:** 4 D3

**MW:** 39.8 kDa

**Gene Summary:** Exhibits weak E3 ubiquitin-protein ligase activity (By similarity). E3 ubiquitin ligases accept ubiquitin from an E2 ubiquitin-conjugating enzyme in the form of a thioester and then directly transfer the ubiquitin to targeted substrates (By similarity). Can ubiquitinate AKT1 preferentially at 'Lys-284' involving 'Lys-48'-linked polyubiquitination and seems to be involved in regulation of Akt signaling by targeting phosphorylated Akt to proteosomal degradation (By similarity). Proposed to preferentially act as a SUMO E3 ligase at physiological concentrations (By similarity). Plays a role in the control of mitochondrial morphology by promoting mitochondrial fragmentation, and influences mitochondrial localization (By similarity). Likely to promote mitochondrial fission through negatively regulating the mitochondrial fusion proteins MFN1 and MFN2, acting in a pathway that is parallel to the PRKN/PINK1 regulatory pathway (PubMed:24898855). May also be involved in the sumoylation of the membrane fission protein DNM1L (By similarity). Inhibits cell growth (By similarity). When overexpressed, activates JNK through MAP3K7/TAK1 and induces caspase-dependent apoptosis (By similarity). Involved in the modulation of innate immune defense against viruses by inhibiting DDX58-dependent antiviral response (By similarity). Can mediate DDX58 sumoylation and disrupt its polyubiquitination (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR205346