

Product datasheet for MG205346

Mul1 (NM 026689) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Mul1 (NM_026689) Mouse Tagged ORF Clone

Tag: **TurboGFP**

Symbol: Mul1

Synonyms: 0610009K11Rik; AV000801; Gide

Mammalian Cell

Selection:

Neomycin

pCMV6-AC-GFP (PS100010) Vector:

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >MG205346 representing NM_026689

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

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGAGAGCGGTTCGCGACCGTCGCCCAGGTCATCCTGCTGGGCACCAGTTCGATGGTCACCGCCG TACTGTACTCCATATACCGGCAGAAGGCCCAGGTCGCGCAGGAACTCAAGGAGGCTAAGAAGATTCATCT GGGTGAAGATTTAAAGGGCATTCTTTCAGAAGCACCGGGGAAGTGTGTCCTTACGCTGTCATCGAAGGA GCTGTGCGGTCTGTTAAAGAAACACTCAACAGCCAGTTCGTGGAAAACTGCAAGGGGGTGATCCAGCGGC TGTCGCTTCAGGAGCATAAGATGGTGTGGAACCGAACTACCCACCTTTGGAATGACTATTCCAAGATCAT TCACCAGAGGACTAACACTGTGCCCTTTGACCTCGTGCCCCACGAGGACGGCGTGGCTGTGTCCGTGCGA GTGCTGAAGCCCCTGGATTCAGTGGATCTGGGCCTAGAGACCGTGTACGAGAAGTTCCACCCCTCTGTGC AGTCCTTCACCGATGCCATTGGCCACTACATCAGTGGCGAGAGGCCCAAAGGCATCCAGGAGACAGAGGA GATGCTGAAGGTGGGAGCCACCCTCACGGGGATCGGTGAACTGGTCCTGGACAACACGCTGTCCGCCTG AGTCTAGTGTCCGGCTCTGGAAGGTTCTGGTCCTGGTGTTCGGCTTTGCTACCTGTGCCACCCTCTTCTT CATCCTGAGGAAGCAGTACCTTCATCGGCAGGAGCGCCTGCGCCAGCAGCAGCTCCAGGAAGAGTTCCTT GAACACGAGGCCCAGCTGCTGAGTCAAGCCTCGCCTGAGGACAGGGAGAGTCTGAAGAGCGCCTGTGTTG TGTGTCTGAGCAACTTCAAGTCCTGTGTCTTCCTCGAGTGCGGGCATGTGTGTTCCTGCCGCCAGTGTTA CCTTGCCTTGCCAGAGCCCAAGAGGTGCCCGATCTGTCGGCGGGAGATCACCAGGGTGATACCCTTGTAT

AACAGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG205346 representing NM_026689

Red=Cloning site Green=Tags(s)

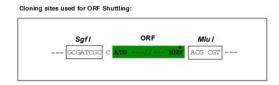
MESGSRPSLGQVILLGTSSMVTAVLYSIYRQKAQVAQELKGAKKIHLGEDLKGILSEAPGKCVPYAVIEG AVRSVKETLNSQFVENCKGVIQRLSLQEHKMVWNRTTHLWNDYSKIIHQRTNTVPFDLVPHEDGVAVSVR VLKPLDSVDLGLETVYEKFHPSVQSFTDAIGHYISGERPKGIQETEEMLKVGATLTGIGELVLDNNAVRL QPPKQGMQYYLSSQDFDSLLHRQESSVRLWKVLVLVFGFATCATLFFILRKQYLHRQERLRQQQLQEEFL EHEAQLLSQASPEDRESLKSACVVCLSNFKSCVFLECGHVCSCRQCYLALPEPKRCPICRREITRVIPLY NS

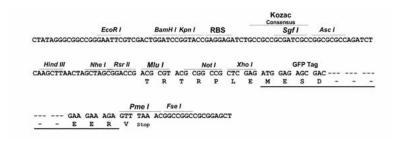
TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:





ACCN: NM_026689

ORF Size: 1056 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: <u>NM 026689.3, NP 080965.2</u>

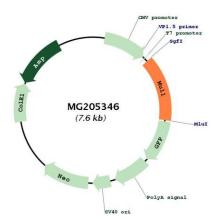
RefSeq Size: 3732 bp
RefSeq ORF: 1059 bp
Locus ID: 68350
UniProt ID: Q8VCM5
Cytogenetics: 4 D3

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 caspasedependent 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 MG205346