

## Product datasheet for **MG226584**

### Magi3 (NM\_133853) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Magi3 (NM_133853) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Magi3
Synonyms:	4732496O19Rik; 6530407C02Rik; AA407180; AI120132; mKIAA1634
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG226584 representing NM_133853 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTCGAAGACGTTGAAGAAGAAGAAGCACTGGCTCAGCAAGGTGCAGGAGTGTGCGGTATCCTGGGCCG  
GGCCCCGGGCGACTTGGGCGCCGAGATCCGCGGCGGCGCCGAGCGGGCGAGTTCCTTACCTGGGGCG  
GCTCCGCGACGAGGCTGGCGGCGCGGAGGCACCTGCTGCGTGGTCTCGGGCAAGCGCCAGTCCGGGC  
GATGTGCTGTTGGAGGTGAACGGGACGCCGGTCACTGGGCTCACCAACCGGGACACTCTGGCTGTATCC  
GCCACTCCGCGAGCCCATCCGTCTGAAGACGGTGAAGCCAGGCAAAGTTATAAATAAAGATTTGCGACA  
CTACCTGAGTCTTCAGTTTCAGAAAGGATCAATTGACCACAACTACAGCAAGTCATCAGAGATAATCTC  
TATTTGAGAACCATCCCATGCACTACAAGGGCTCCCAGGGATGGGGAAGTCCCAGGGGTGGATTAACT  
TCATTTCTGTTGAACAATTCAAGGCACTGGAAGAAAGCGGAGCATTGTTAGAAAGTGAACGATATGATGG  
AAATTTCTATGGCACACCCAAGCCTCCAGCAGAGCCTAGTCCCTTCCAGCCCGATCCAGTTGATCAGGTC  
CTCTTTGACAATGAGTTTGACACAGAATCCCAAAGAAAAAGAACCATCTGTGCAAGATGGAAGGA  
TGGACAGCTCTCCCTGAAGAAGAAGAAGATGAGGACAAAGAAGCTGTTAATGGCAGCGGAAGCATGGA  
AACTAGAGAGATGCATTCTGAGACATCTGACTGCTGGATGAAGACTGTTCCAAGTTATAACCAACAAAT  
AGTCCATGGACTTTAGAAATTAATGATGAGAGATGAGAATCTGGAACCGCTGCCAAAAACTGGGAAA  
TGGCCTACACTGACACAGGAATGATCTACTTCATTGATCATAATACGAAGACAACCACCTGGTTGGATCC  
TCGTCTCTGCAAGAAAGCCAAAGCCCTGAAGACTGTGAAGATGGAGAGCTTCCCTATGGCTGGGAGAAA  
ATAGAGGACCCTCAGTATGGAACATACTACGTTGATCACCTCAACCAGAAAACTCAGTTTAAAAATCCAG  
TGGAGGAAGCCAAGAGGAAAAAGCAGTTAGGACAGGCTGAAATTCATTCTGCAAAAACAGATGTGGAAAG  
AGCACACTTTACTCGGGACCCATCCCAACTAAAGGTGTACTTGTTCGAGCATCGCTGAAAAAAGCACC  
ATGGGCTTTGGCTTTACCATTATTGGTGGAGATAGGCTGATGAATTTCTACAAGTAAAAAAGCTGCTCA  
AAGATGGTCTGCCGCTCAGGATGGGAAAATTGCACCAGGTGATGTTATTGTAGACATCAATGGCAACTG  
TGTCTTGGTCACACCCATGCAGATGTTGTCCAGATGTTCAACTGGTACCTGTCAACCAGTATGTCAAC



[View online »](#)

CTTACTTTATGCCGTGGTTATCCACTTCCTGATGACAGTGAAGATCCTGTTGTGGACATTGTTGCTGCTA  
 CCCCTGTCATCAATGGACAATCTTTAACAAAGGGAGAGACATGCATGAATACTCAGGATTTTAACTGGG  
 AGCAATGGTTTTGGATCAGAATGGAAAAACAGGACAAATCTTGGCCAGTGCATCGTCTCAATGGTCCATCT  
 GAGTCAAGTGAGCAGAGGGCATCTCGGCATCATCAGGCAGCTCACAGCCTGAAC TAGTACTATCCCTC  
 TGATTAAGGGCCCCAAAGGCTTTGGGTTTGAATTGCTGACAGCCCAACTGGACAGAAGGTGAAAATGAT  
 ATTGGATAGCCAGTGGTGTCAAGGCCTTCAAAAAGGGGATATCATCAAAGAAATTTACCATCAGAATGTG  
 CAGAATTAACACATCTCCAAGTCTAGAAGTCTAAAGCAGTCCCAGTAGTGCAGATGTTCCATTGC  
 TTATCTTAAGAGGAGTCTTGTTCACCAACTAAAAGTCCAAAACGAAAACAGATACAAAAGGAAAATTC  
 AGGAAGTTTGGAGACTATAAATGAGCCTATTCCCCAGCCTATGCCTTTTCCGCCAGCATAATCAGATCA  
 GGATCCCCAAAATTGGATCCTTCTGAGGTCTACCTGAAATCTAAGACTTTATATGAAGATAAACCACCAA  
 ACACCAAAGATCTGGATGTCTTTCTCGGAAACAAGAATCAGGGTTTGGCTTCAGGGTGCTAGGAGGAGA  
 TGGACCTGACCAGTCTATATATATTGGGGCCATCATTCCCCTGGGAGCAGCTGAAAAAGATGGTAGGCTC  
 CGTGCTGCTGATGAATTGATGTGATTGATGGGATTCTGTTAAAGGAAAATCACACAAGCAAGTATTAG  
 ACTTAATGACTACTGCTGCTCGAAATGGACACGTGCTACTAAGTGTGAGGAGGAAGATCTTCTATGGAGA  
 GAAACAACCCGAGGACGAAAGCCATCAAGCCTTCTCACAGAACGGATCTCCTCGCCTGAATCGGGCAGAG  
 CTTCCAACCAAGGTCTGCCCCACAGGAGGCTATGATGTCACCTTACAGAGGAAAGAAAATGAAGGGTTTG  
 GTTTTGTCATCCTCACCTCTAAAAGCAAGCCGCCCCAGGAGTTATTCTCATAAAATTGGCCGGGTCAT  
 AGACGGAAGTCCAGCTGATCGTTGTGGAGGACTGAAAGTTGGAGATCACATCTCTGCTGTGAATGGGCGAG  
 TCCATTGTCGACCTATCCCATGATAATATTGTTGAGCTCATCAAAGATGCTGGAGTACCCTCACGCTGA  
 CAGTGGTTGCTGAAGAAGAGCATCATGGTCCACCATCAGGAACAAACTCAGCCAGGACAGAGCCAGCACT  
 ACAGCACAGGCCATGGGACAAGCACAGCCAACCACATACCTGGGGACAGAATTGCCCTAGAAGGTGAA  
 ATTGGGAGAGATGTCTGCAGTCTTACAGACATTCCTGGTCTGACCATAAGCACCTTGCACAGCCTGACA  
 CTGCAGTATTTAGTTGTGGGAGTGGCACAATCAGAGCCTTGGCTGTTACCCTGTGGAGCTGGAGAG  
 AGGCCCTCGAGGCTTTGGGTTACGCTCCGCGGAGGGAAGGAGTACAACATGGGGCTGTTTACCTCGCGC  
 CTGGCCGAGGACGGGCCCATCAAAGACGGCAGGATTACGTTGGTGACCAGATCGTTGAAATCAATG  
 GGGAAACCGACACAAGGCATCACACACTCGAGCAATTGAGCTCATTGAGCTGTTGGGAATAAAGTCTCT  
 CCTCTTCTGAGGCCAGGAACTGGCTTGATACCTGACCACGGTTTGGCTCCTTCCGGTCTGTGCTCTAC  
 GTGAAACCTGAGCAACAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG226584 representing NM\_133853  
 Red=Cloning site Green=Tags(s)

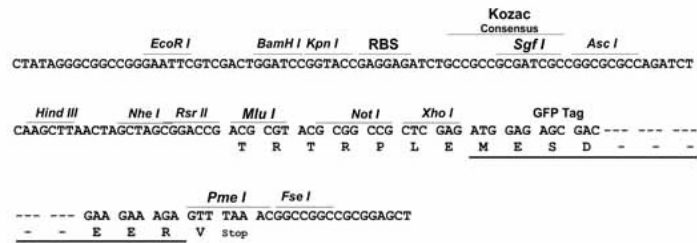
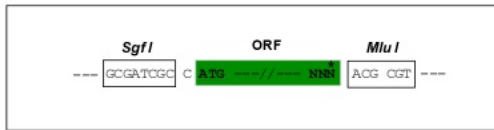
MSKTLKKKKHWL SKVQECVSWAGPPGDLGAEIRGGAERGEFPYLGRRLDEAGGGGTCCVSGKAPSPG  
 DVLLEVNGTPVSGLTNRDLAVIRHFREPIRLKTVKPGKVINKDLRHYLSLQFQKGSIDHKLQVIRDNL  
 YLRTIPCTTRAPRDGEVPGVDYNFISVEQFKALEESGALLESGTYDGNFYGTPKPPAEPSPFPDPVDQV  
 LFDNEFDTESQRKRRTTSVSKMERMDSLPEEEDEDEKEAVNGSGSMETREMHSETSDCWMKTVPSYNQTN  
 SSMDFRNYMMDENLEPLPKNWEMAYTDTGMIYFIDHNTKTTTWLDPRLCKKAKAPEDCEDGELPYGWEK  
 IEDPQYGTYYVDHLNQTQFENPVVEAKRKKQLGQAEIHSAKTDVERAHFTRDPSQLKGVLVRAASLKKST  
 MGFGFTIIGGDRPDEFLQVKNVLKDGPAAQDQGIAPGDVIDINGNCVLGHATHADVVMQFQLVPVQYVN  
 LTLCRGYPLPDDSEDPVVDIVAA TPVINGQSLTKGETCMNTQDFKL GAMVLDQNGKSGQILASDRLNGPS  
 ESSEQRASLASSGSSQPELVTIPLIKGPKGFFAIADSPTGQKVKMILDSQWCQGLQKGDIIKEIYHQN  
 QNLTHLQVVEVLKQFPVGADVPLLILRGGPCSPKTKAKTKDTKENSGSLETINEPIQPMPFPSPSIRS  
 GSPKLDPSEVYLKSKTL YEDKPPNTKDLDFLRLKQESGFGRVLLGGDGPDSIYIGAIIPLGAAEKDGR  
 RADELMCIDGIPVKGKSHKQVLDLMTTAARNGHVLLTVRRKIFYGEKQPEDESHQAFSQNGSPRLNRAE  
 LPTRSAPQEAYDVTLQRKENEGFVILTSKSKPPPGVIPHKIGRVIDGSPADRCGGLKVGHDHISAVNGQ  
 SIVDL SHDNIVQLIKDAGVTVTLLVVAEEEEHHPSPGTSARQSPALQHRPMGQAQANHIPGDRIALEGE  
 IGRDVCSSYRHSWSDHKHLAQPD TAVISVVGSRHNQSLGCPVELERGRGFGFSLRGGKEYNMGLFILR  
 LAEDGPAIKDGRIVHGDQIVEINGEPTQGITHTRAIELIQAGGNKVL LLLLRPGTGLIPDHGLAPSGLCSY  
 VKPEQH

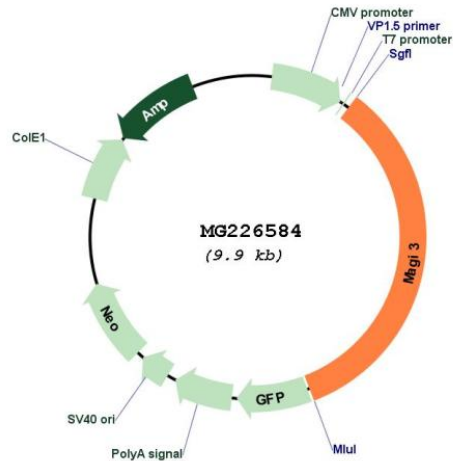
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



**Plasmid Map:**


**ACCN:** NM\_133853

**ORF Size:** 3378 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\\_133853.3](#), [NP\\_598614.1](#)

**RefSeq Size:** 6672 bp

**RefSeq ORF:** 3381 bp

**Locus ID:** 99470

**UniProt ID:** [Q9EQJ9](#)

**Cytogenetics:** 3 45.52 cM

**Gene Summary:**

Acts as a scaffolding protein at cell-cell junctions, thereby regulating various cellular and signaling processes. Cooperates with PTEN to modulate the kinase activity of AKT1. Its interaction with PTPRB and tyrosine phosphorylated proteins suggests that it may link receptor tyrosine phosphatase with its substrates at the plasma membrane. In polarized epithelial cells, involved in efficient trafficking of TGFA to the cell surface. Regulates the ability of LPAR2 to activate ERK and RhoA pathways. Regulates the JNK signaling cascade via its interaction with FZD4 and VANGL2.[UniProtKB/Swiss-Prot Function]