

Product datasheet for MR226578

Magi3 (NM_001159354) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Magi3 (NM_001159354) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Magi3
Synonyms:	4732496O19Rik; 6530407C02Rik; AA407180; A1120132; mKIAA1634
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>MR226578 representing NM_001159354 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCGAAGACGTTGAAGAAGAAGAAGCACTGGCTCAGCAAGGTGCAGGAGTGTGCGGTATCCTGGGCCG
GGCCCCGGGCGACTTGGGCGCCGAGATCCGCGCGCGCCGAGCGCGGCGAGTTCCCTTACCTGGGGCG
GCTCCGCGACGAGGCTGGCGGCGCGGAGGCACCTGCTGCGTGGTCTCGGGCAAGCGCCAGTCCGGGC
GATGTGCTGTTGGAGGTGAACGGGACGCCGGTCACTGGGCTCACCAACCGGACACTCTGGCTGTATCC
GCCACTCCGCGAGCCCATCCGTCTGAAGACGGTGAAGCCAGGCAAAGTTATAAATAAAGATTTGCGACA
CTACCTGAGTCTTCAGTTTCAGAAAGGATCAATTGACCACAACTACAGCAAGTCATCAGAGATAATCTC
TATTTGAGAACCATCCCATGCACTACAAGGGCTCCCAGGGATGGGGAAGTCCCAGGGTGGATTATAACT
TCATTTCTGTTGAACAATCAAGGCACTGGAAGAAAGCGGAGCATTGTTAGAAAGTGAACGTATGATGG
AAATTTCTATGGCACACCCAAGCCTCCAGCAGAGCCTAGTCCTTCCAGCCCGATCCAGTTGATCAGGTC
CTCTTTGACAATGAGTTTGACACAGAATCCAAAGAAAAAGAACACATCTGTGAGCAAGATGAAAGGA
TGGACAGCTCTCCCTGAAGAAGAAGAAGATGAGGACAAAGAGCTGTTAATGGCAGCGGAAGCATGGA
AACTAGAGAGATGCATTCTGAGACATCTGACTGCTGGATGAAGACTGTTCCAAGTTATAACCAAAACAAAT
AGCTCCATGGACTTTAGAAATTATATGATGAGAGATGAGAATCTGGAACCGCTGCCCAAAAACTGGGAAA
TGGCCTACACTGACACAGGAATGATCTACTTCATTGATCATAATACGAAGACAACCACCTGGTTGGATCC
TCGTCTCTGCAAGAAAGCCAAAGCCCCTGAAGACTGTGAAGATGGAGAGCTTCCCTATGGCTGGGAGAAA
ATAGAGGACCCTCAGTATGGAACATACTACGTTGATCACCTCAACCAGAAAACTCAGTTTGAAAAATCCAG
TGGAGGAAGCCAAGAGGAAAAAGCAGTTAGGACAGGCTGAAATTCATTCTGCAAAAACAGATGTGGAAG
AGCACACTTTACTCGGGACCCATCCAACCTAAAGGTGTACTTGTTCGAGCATCGCTGAAAAAAGCACC
ATGGGCTTTGGCTTTACCATTATTGGTGGAGATAGGCCTGATGAATTTCTACAAGTAAAAACGTGCTCA
AAGATGGTCTGCGCTCAGGATGGGAAAATTGCACCAGGTGATGTTATTGTAGACATCAATGGCAACTG
TGTCTTGGTCACACCATGCAGATGTTGTCCAGATGTTTCAACTGGTACCTGTCAACCAGTATGTCAAC
CTTACTTTATGCCGTGGTTATCCACTTCTGATGACAGTGAAGATCCTGTTGTGGACATTGTTGCTGCTA



CCCCTGTCATCAATGGACAATCTTTAACAAAGGGAGAGACATGCATGAATACTCAGGATTTAACTGGG
AGCAATGGTTTTGGATCAGAATGGAAAATCAGGACAAATCTTGGCCAGTGATCGTCTCAATGGTCCATCT
GAGTCAAGTGAGCAGAGGGCATCTCGGCATCATCAGGCAGCTCACAGCCTGAACTAGTGACTATCCCTC
TGATTAAGGGCCCCAAAGGCTTTGGGTTTGAATTTGCTGACAGCCAACTGGACAGAAGGTGAAAATGAT
ATTGGATAGCCAGTGGTGTCAAGGCCTTCAAAAAGGGGATATCATCAAAGAAATTTACCATCAGAATGTG
CAGAATTTAACACATCTCCAAGTCGTAGAAGTCCTAAAGCAGTCCCAGTAGGTGCAGATGTTCCATTGC
TTATCTTAAGAGGAGTCTTGTTCACCAACTAAAACGCAAAACGAAAACAGATACAAAAGGAAAATTC
AGGAAGTTTTGGAGACTATAAATGAGCCTATTTCCAGCCTATGCCTTTTCCGCCAGCATAAATCAGATCA
GGATCCCCAAAATTTGGATCCTTCTGAGGTCTACCTGAAATCTAAGACTTTATATGAAGATAAACCCCAA
ACACCAAAGATCTGGATGTCTTTCTTGGAAAACAAGAATCAGGGTTTGGCTTCAGGGTGCTAGGAGGAGA
TGGACCTGACCAGTCTATATATTGGGGCCATCATTCCCTGGGAGCAGCTGAAAAGATGGTAGGCTC
CGTGCTGCTGATGAATTGATGTGATTGATGGGATTCTGTAAAGGAAAATCACACAAGCAAGTATTAG
ACTTAATGACTACTGCTGCTCGAAATGGACACGTGCTACTAACTGTCAGGAGGAAGATCTTCTATGGAGA
GAAACAACCCGAGGACGAAAGCCATCAAGCCTTCTCACAGAACGGATCTCCTCGCCTGAATCGGGCAGAG
CTTCCAACCGAGTCTGCCACAGGAGGCTATGATGTCACCTTACAGAGGAAAGAAAATGAAGGGTTTG
GTTTTGTCATCCTCACCTCTAAAAGCAAGCCGCCCCAGGAGTTATTCTCATAAAATTTGCCGGGTTCAT
AGACGGAAGTCCAGCTGATCGTTGTGGAGGACTGAAAGTTGGAGATCACATCTCTGCTGTGAATGGCGAG
TCCATTGTCGACCTATCCCATGATAATATTGTTGAGCTCATCAAAGATGCTGGAGTACCCTCACGCTGA
CAGTGGTTGCTGAAGAAGAGCATCATGGTCCACCATCAGGAACAAACTCAGCCAGGCAGAGCCCAGCACT
ACAGCACAGGCCCATGGGACAAGCACAAGCCAACCACATACCTGGGGACAGAATTGCCCTAGAAGGTGAA
ATTGGGAGAGATGCTGCAGTCTTACAGACATTCCTGGTCTGACCATAAGCACCTTGCACAGCCTGACA
CTGCAGTATTTCAAGTTGGGAGTGGCACAATCAGAGCCTTGGCTGTTACCTGTGGAGCTGGAGCTGGAG
AGGCCCTCGAGGCTTTGGGTTGAGCCTCGCGGGAGGGAAGGAGTACAACATGGGGCTGTTTCACTCTGCGC
CTGGCCGAGGACGGGCCCGCCATCAAAGACGGCAGGATTACGTTGGTGACCAGATCGTTGAAATCAATG
GGGAACCGACACAAGGCATCACACACACTCGAGCAATTGAGCTCATTGAGCTGTTGGGAATAAAGTCTCT
CCTCCTTCTGAGGCCAGGAACTGGCTTGATACCTGACCACGGTATTGGGATACTAATAGTCTTCTCATCT
TCCAATGTCATTTATGATGAACAGCCGCCACCTCTCCCATCTTACATTCTGCTTCCACATTTGAAGAGT
CTCATGTGCCAGCAACTGAAGACTCTCTGACTAGAGTTTCAAGATATGTGAAAAGGCAGAAGAAATTAAGGA
CACTGTACAAGAAAAGAAAAGCACTTTAAATGGAAGCCAGCCTGAGATGAAGTATCAGTCTGTCCACAAA
ACTATGAGTAAGAAGGATCCACCCAGAGGTTCCGGGCATGGCGAGAAGAGTGCAGTAAAAGGAGAAAATG
GTGTTACACGGAGAGGTAGATCTGCTAGTCCCAAAAAGTCAAGTTAACCGACATTCAGAGGAACATTTGGA
AAAGATTTCCAGGCCCTAAAAGTATGATCCCAAGAAAATCTAGAGACCCTCACTGAGCCCTAGGAAA
GGAGAAAGTAAAGGTCGGCTCACCATTAAGGCGGGCTCTGGACAAGATCCCAATAGAAAAGACAGAGGAC
GGTCTTCTAGCCCAAGAAGCAGCAAAAAGATAGGAGGCAACAGCCTGTCAAACACTGAAGGCAAATATC
AGAGGCTGGGAGCCGAAGAGCAGCAGGCCACCCTAGAGACAGCACTGAACAGCTCCAGATGGGAGAGAA
AAGTCAGGGGTCAGCAGGAAAGATCTGAAGCAGAGTCAAGCAGGAAAAACCAGAACAAGTCTCCAGAGA
AAAAGAGCAGTAAAGTTGATGAAACATCTCTCCATCCAAAAGACTAGCAGCACTGCTGGTAGGGTAGT
ATCTGAAAAGGAAAAGGAAAAGCAACAGCAGGAGAAAACAAGTAGAGAAAAGTACAGCAGCAGCAGCAG
GCAGAGAATCAGAGGTCACGGACAGATGCAGGGAGCGTGCAGGGTGCACACCTCAAAGTAGCTCTTAGT
CAAGAAAAGCACCCATCACTCCAGGACCCTGGAGGGTGCCACGTGCAAATAAAGTACAGGCACTACTGGC
ATGGCTGACAAACAGCTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR226578 representing NM_001159354
 Red=Cloning site Green=Tags(s)

```
MSKTLKKKKHWL SKVQECASWAGPPGDLGAEIRGGAERGEFPYLGRRLDEAGGGGGTCCVVSGKAPSPG
DVLLEVNGTPVSGLTNRDTLAVIRHFREPIRLKTVKPGKVINKDLRHYLSLQFQKGSIDHKLQQVIRDNL
YLRTIPCTTRAPRDGEVPGVDYNFISVEQFKALEESGALLESGTYDGNFYGTPKPPAEPSPFPQDPVDQV
LFDNEFDTESQRKRTTSVSKMERMDSSLPEEEDEDEKAVNGSGSMETREMHSETSDCWMKTVPSYNQTN
SSMDFRNYMMDRENLEPLPKNWEMAYTDTGMIYFIDHNTKTTTWDLPRLCKKAKAPEDCEDGELPYGWEK
IEDPQYGTYYYVDHLNQKTQFENPVEEAKRKKQLGQAEIHS AKTDVERAHFTRDPSQLKGVLVRA SLKKST
MGFGFTIIGGDRPDEFLQVKNVLKDGPAAQDGKIAPGDVIVDINGNCVLGHTHADVVQMFQLVPVNQYVN
LTLCRGYPLPDDSEDPVVDIVAATPVINGQSLTKGETCMNTQDFKLGAMVLDQNGKSGQILASDRLNGPS
ESSEQRASLASSGSSQPELVTIPLIKGPKGF GFAIADSPTGQVKMILDSQWCQGLQKGDIIKEIYHQNV
QNLTHLQVVEVLKQFPVGADVPLLILRGGPCSPKTAKTKTDTKENSGLTIN EPIQPMPFPSSIIRS
GSPKLPDSEVYLKSKTL YEDKPPNTKDL DVFLRKQESGFGRV LGGDGPDQSIYIGAI IPLGAAEKDGR L
RAADELMCIDGIPVKGKSHKQVLDLMTT AARNGHVLLTVRRKIFYG EKQPEDESHQAF SQNGSPRLNRAE
LPTRSAPQEAYDVT LQRKENEGFVIL TSKSKPPP GVI PHKIGRVIDGSPADRCGGLKVG DHI SA VNGQ
SIVDL SHDNIVQLIKDAGVTVT LTVVAEEHHGPPSGTNSARQSPAL QHRPMGQAQANH IPGDRIALEGE
IGRDVCSYRHSWSDHKHLA QPDTAVISVVGSRHNQSLG CYPVELERGRPGF GFSLRGGKEYNMGLFILR
LAEDGPAIKDGR IHVGDQIVE INGEPTQGITHTRAIEL IQAGGNKVL LLLRPGTGLIPDHGDWDTNSPSS
SNVIYDEQPPPLPSSH SASTFEESHVPATEDSL TRVQICEKAEELKDTVQEKKSTLNGSQPEMKYQSVHK
TMSKDDPPRSGHGEKSRLKGENGVTRRGRSASP KKS VNRHSEEHLEKIPRPLKSDPKEKSRDRSLSPRK
GESKGR LTIKAGSGQDPNRKDRGRSSSPKKQ QKIGGNSL SNT EGGLESEAGSRRAAGHPRDSTEQLPDGRE
KSGVSRKDLKQS QPGKTRTKSPEKKSSKVD ETS LPSKKT SSTA GRV VSEKEK GKPTAGETSRETVEHTQ
ISAKQLKQEAQEKTALGNAD DHKGRESEVTDRCRERAGCTPQSSSLVKKAPITPGPWRVPRANKV TGTG
MADKQL
```

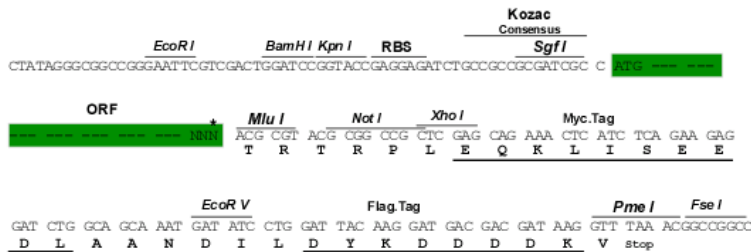
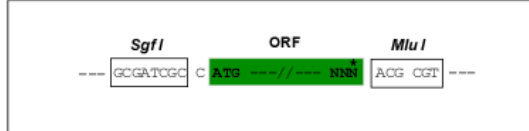
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

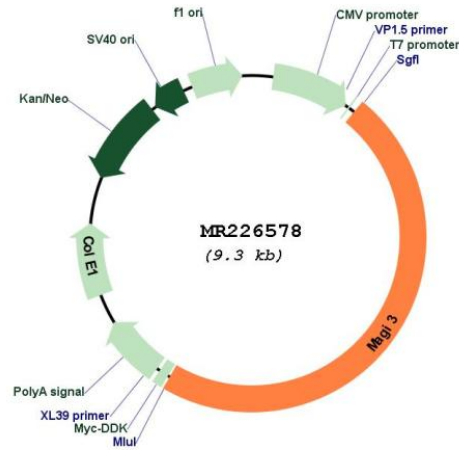
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_001159354

ORF Size: 4428 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_001159354.1](#), [NP_001152826.1](#)

RefSeq Size: 6581 bp

RefSeq ORF: 4431 bp

Locus ID: 99470

Cytogenetics: 3 45.52 cM

MW: 162.1 kDa

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]