

## Product datasheet for RC227462

### MAGI3 (NM\_001142782) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** MAGI3 (NM\_001142782) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** MAGI3  
**Synonyms:** dj730K3.2; MAGI-3  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >RC227462 representing NM\_001142782  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGCGATCGCC

ATGTCSAAGACGCTGAAGAAGAAGAAGCACTGGCTCAGCAAGGTGCAGGAGTGCGCCGTGTCTGGGCCG  
 GGCCCCGGGCGACTTCGGCGCGGAGATCCGCGGTGGCGCGGAGCGTGGCGAGTTCCTACCTGGGGCG  
 GCTCCGCGAGGAGCCCGCGGGGGCACCTGCTGCGTCGTCTCGGGCAAGGCGCCAGCCAGGCGATGTG  
 CTGCTGGAGGTAACGGGACGCCTGTACGCGGGCTCACCAACCGGGACACCTGGCTGTATCCGCCACT  
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 CCGTTGAACAGTTCAAAGCACTGGAAGAGAGTGGAGCATTGTTAGAAAAGTGGGACATATGATGGAAACT  
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 GCTCTCTTCTGAAGAGGAAGAAGATGAGGACAAGGAAGCTATTAATGGCAGTGGAAACGACGAAAACAG  
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 CCGCAGCTCAGGATGGGAAAATGCACCAGGCGATGTTATTGTAGACATCAATGGCAACTGTGTCCTCGG  
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 TGTCTGGTTATCCACTTCTGATGACAGTGAAGATCCTGTTGTGGACATTGTTGCTGCTACCCCTGTCA



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TCAATGGACAGTCATTAACCAAGGGAGAGACTTGCATGAATCCTCAGGATTTTAAGCCAGGAGCAATGGT  
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ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC227462 representing NM\_001142782  
 Red=Cloning site Green=Tags(s)

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MSKTLKKKKHWL SKVQECASVWAGPPGDFGAEIRGGAERGEFPYLGRLEEPGGGTCCVVS GKAPSPGDV
LLEVNGTPVSGL TNRDTLAVIRHFREPIRLKTVKPGKVIN KDLRHYLSLQFQKGSIDHKLQVIRDNLYL
RTIPCTTRAPRDGEVPGVDYNFISVEQFKALEESGALLESGTYDGNFYGTPKPPAEPSPFPDPVDQVLF
DNEFDAESQRKRTTSVSKMERMDS SLP EEEEDK EAI NGSGNAENRERHSESSDWMKTVPSYNTSSM
DFRNYMMRDETLEPLPKNWEMAYTD TGM IYFIDHNTKTTTWLDPRLCKKAKAPEDCEDGELPYGWKIED
PQYGYTYVDHLNQKTQFENPVVEEAKRKKQLGQVEIGSSKPDMEKSHFTRDPSQLKGV LVRASLKKSTMGF
GFTIIGDRPDEF LQVKNV LKDGPA AQDGKIAPGDVIVDINGNCVLGHTHADVVQMFQLVPVNQYVNLTL
CRGYLPDDSEDPVVDIVAATPVINGQSLTKGETCMNPQDFKPGAMVLEQNGKSGHTLTGDGLNGPSDAS
EQRVSMASGSSQPELVTIPLIKGPKGF GFAIAD SPTGQKVKMILDSQWCQGLQKGDIIKEIYHQNVQNL
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GKD VSTSYRHSWSDHKHLAQPDTAVISVVGSRHNQNLGCYPVELERGPRGFSLRGGKEYNMGLFILRL
AEDGPAIKDGRIHVGDQIVEINGEPTQGITHTRAIELIQAGGNV LLLL RPTGLIPDHGDWDINNPSSS
NVIYDEQSPLPPSSHFA SIFEESHVPVIEESLRVQICEKAEELKDIVPEKKSTLNENQPEIKHQSL LQKN
VSKRDPSSSHGHSNKKNL LKVENGVTRRGRSVSPKKPASQHSEELDKIP SPLKNNPKRRPRDQSLSPSK
GENKSCQVSTRAGSGDQCRKSRGRSASP KKQQKIEGSKAPSNAEAKLLEGKSRRIAGYTSNAEQIPDG
KEKSDVIRKDAKQNLQLEKSRTRSPEKKIKRMVEKSLPSKMTNKTT SKEVSENEKGGKVT TGETSSSNDKI
GENVQLSEKRLKQEP EEEKVVS NKTEDHKGKELEAADKNKETGRFKPESSSPVKKTLITPGPWKVP SGNKV
TGTIGMAEK RQ
  
```

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

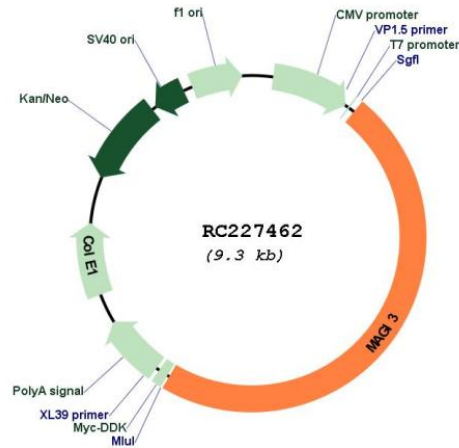
SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



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

**Plasmid Map:**


**ACCN:** NM\_001142782

**ORF Size:** 4443 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\\_001142782.2](#)

**RefSeq ORF:** 4446 bp

**Locus ID:** 260425

**UniProt ID:** [Q5TCQ9](#)

**Cytogenetics:** 1p13.2

**Protein Families:** Druggable Genome

**Protein Pathways:** Tight junction

**MW:** 162.8 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]