

Product datasheet for **SC110943**

MAG (NM_002361) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MAG (NM_002361) Human Untagged Clone
Tag:	Tag Free
Symbol:	MAG
Synonyms:	GMA; S-MAG; SIGLEC-4A; SIGLEC4A; SPG75
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

Fully Sequenced ORF: >OriGene ORF within SC110943 sequence for NM_002361 edited (data generated by NextGen Sequencing)

```

ATGATATTCTCACGGCACTGCCTCTGTTCTGGATTATGATTTACGCCTCCCAGGGGGT
CACTGGGGTGCCTGGATGCCCTCGTCCATCTCGGCCTTCGAAGGCACGTGCGTCTCCATC
CCCTGCCGCTTTGACTTCCCGGATGAGCTGCGGCCGCTGTGGTGCATGGTGTCTGGTAC
TTCAATAGCCCTACCCAAGAACTACCCCGGTGGTCTTCAAGTCGCGCACCAAGTA
GTCCACGAGAGCTTCCAGGGCCGACGCCCTCCTGGGGACCTGGCCCTGCGAAACTGC
ACCCTCCTGCTCAGCAAGTACGCCCGAGCTGGGCGGAAGTACTACTTCCGTGGGGAC
CTGGGCGGCTACAACAGTACACCTTCTCAGAGCACAGTGTCTGGATATCGTCAACACC
CCCAACATCGTGGTGCCCCAGAGGTGGTGGCAGGCACGGAGGTGGAGGTGAGTGCATG
GTGCCGACAACCTGCCAGAGCTGCGCCCTGAGCTGAGCTGGCTGGGCCACGAGGGGCTG
GGGGAGCCGCTGTGCTGGGCCGCTGCGGGAGGACGAGGGCACCTGGGTGCAGGTGTCA
CTGCTGCACTTTCGTGCCACGAGGGAGGCCAACGGCCACAGGCTGGGCTGCCAGGCCCTC
TTCCCAACACCACCCTGCAGTTCGAGGGCTACGCCAGCATGGACGTCAAGTACCCCGG
GTGATTGTGGAGATGAACTCCTCGTGGAGGCCATCGAGGGCTCCCACGTGAGCCTGCTC
TGTGGGGCTGACAGCAACCCCGCCGCTGCTGACCTGGATGCGGGACGGGACAGTCCTC
CGGGAGGCGGTGGCCGAGAGCCTGCTCCTGGAGCTGGAGGAGGTGACCCCGCCGAAGAC
GGCGTCTATGCCTGCCTGGCCGAGAATGCCTATGGCCAGGACAACCGCACCGTGGGGCTC
AGTGTCATGTATGCACCTGGAAGCCAACAGTGAACGGGACAATGGTGGCCGTAGAGGGG
GAGACGGTCTCTATCTTGTGCTCCACACAGAGCAACCCGGACCCTATTCTCACCATCTTC
AAGGAGAAGCAGATCCTGTCCACGGTCACTACGAGAGCGAGCTGCAGCTGGAGCTGCCG
GCCGTGTACCCGAGGATGATGGAGAGTACTGGTGTGTGGCTGAGAACCAGTATGGCCAG
AGGGCCACCGCCTTCAACCTGTCTGTGGAGTTCGCCCCGTGCTCCTCCTGGAGTCCCAC
TGCGCGGAGCCCGAGACACGGTGCAGTGCCTGTGCGTGGTGAAGTCCAACCCGGAGCCG
TCCGTGGCCTTTGAGCTGCCATCGCGCAATGTGACCGTGAACGAGAGCGAGCGGGAGTTC
GTGTAICTCGGAGCGCAGCGCCCTCGTGCTCACCAGCATCCTCACGCTGCGGGGGCAGGCC
CAGGCCCGCCCCGCGTCATCTGCACCGCGAGGAACCTCTATGGCGCCAAGAGCCTGGAG
CTGCCCTTCCAGGGAGCCATCGACTGATGTGGCCAAGATCGGGCCTGTGGGCGCCGTG
GTCGCCTTTGCCATCCTGATTGCCATCGTCTGCTACATTACCCAGACACGCAGGAAAAAG
AACGTGACAGAGAGCCCCAGCTTCTCGGCAGGGGACAACCCTCCCGTCTGTTCCAGCAGC
GACTTCCGCATCTCTGGGCACCCAGAGAAGTACGAGAGCGAGAGGCGCCTGGGATCTGAG
AGGAGGCTGCTGGGCCTTCGGGGTGGAGCCCCAGAGCTGGACCTGAGCTATTCTCACTCG
GACCTGGGGAAACGGCCACCAAGGACAGCTACACGCTGACGGAGGAGCTAGCTGAGTAT
GCTGAAATCCGGGTCAAGTGA
    
```

Clone variation with respect to NM_002361.3
 399 c=>t

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_002361 unedited
 GCAAACCCATTCCGGCAGGCGGAGCAGATGTGCAGAAGCAACTGAGTCCAAGTTGTCT
 GGGCGGCTTCAGGTGGACCCAGAAGACGTCCCAACTCAGGGAGATTACAGCGATCACTCAC
 TCGCTGTACAGAAATGATATTCCTCACGGCACTGCCTCTGTTCTGGATTATGATTTCAAGT
 CCCTCGTTGGGGTCACTGGGGTGCCTGGATGCCCTCGTCCATCTCGGCCCTCGAAGGCAC
 GTGCGTCTCCATCCCCTGCCCTTTGACTTCCCGGATGAGCTGCGGCCCGCTGTGGTGCA
 TGGTGTCTGGTACTTCAATAGCCCTACCCCAAGAACTACCCCGGTGGTCTTCAAGTC
 GCGCACCCAAAGTAGTCCACGAGAGCTTCCAGGGCCGAGCCGCCTCCTGGGGGACCTGGG
 CCTGCGAAACTGCACCCTCCTGCTCAGCAACGTACGCCCCGAGCTGGGCGGAAGTACTA
 CTTCCGTGGGGACCTGGGCGGCTACAACCAGTACACCTTCTCAGAGCACAGTGTCTGGA
 TATCGTCAACACCCCAACATCGTGGTGCCCCAGAGGTGGTGGCAGGCACGGAGGTGGA
 GGTGAGCTGCATGGTGCCGACAACGTGCCAGAGCTGCGCCCTGAGCTGAGCTGGCTGGG
 CCACGANGGGCTGGGGAGCCCGCTGTGCTGGGCCGCTGCGGGAGGACGAGGGCACCTG
 GGTGCANGTGTACTGTGCACTTCGTGCCACGAGGGAGGCCAACCGCCACAGGCTGGG
 CTGCCAGGCTCCTTTCCNCACACCACCCTGCAGTTCGAAGGCTACGCCAGCATGGACGT
 TCAGTACCCCGGTGATTGGGGAGATGAACTCCTCGTTGAGGCC

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_002361 unedited
 ATGGACCGCGGGCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTGGCTTTGGGGCA
 TTTATTTTCATGTCCTTTTGTACAGGCCCCAGGGCCAGGTGTGGGGCAGGAGACCAGGC
 AGGAAGTAGCAATAAATAACACGGACAGACAGAGCTCCCTCCAGACAGATGAGGGTAAA
 GGAGGTTAGAGAGGAGCCGTAATGAGGGCGTGGGGTGTGGCAGGGAGGGCAGCTGGG
 AAGGAGGGGGAGTCAAGCCCCCAGGACCTCACTGTACCTGCCTCACTCCCTCCTGCC
 CCAGCCCCGATACTTTTGGGAGGAAGGGAGCCACAGCCAGTGGGGCCAGCGAGGGTC
 CTGAGGGGGTATTTTTACCATTTCTCACCTTTTATTTCCACCCACCCCTTCCCCC
 CCCCCCTTCTCCCTTTCCCTCTCTTCGCTCCACCCCTCCCCCTTCCCCCTT
 TTCCACCTATTTATTTCTCAACCTCACTACCTAGCCTCAGCCTCAGCTATTCACCTG
 CGCAACCCTCCCTCCCCCCCCCTCCCCCTATACTCCTACTTTCTTTTATTTCCATCCC
 CCCCCCTCCCTCTCTCGTTCCCCCCCCACAATAATTTATCAATTCACACTCGTCTGT
 GACCTTCCGCGCACCCACCGCAATAATATCCCCCCCCCTCCCTCCCGCTCCCGCCCC
 ATCTTTATTATTCTCCCCCTTTTCTCTGCATCACCCACCCCTCCCATTTCTTC
 TCTTTATAAAGAAGTACCCTCTCCCCCGCCGCTCGCGATTACATTCTTTCTCCTCTCT
 CTCCCCCTCTGCACCTCTCTCATATTAGCATCTCACTTCTTCTTCTTCTTCTCGCTCGG
 TACACCCCGAGATTTTATCCGGCGTTCATTTTCGCTCGCTCGCTN

Restriction Sites:

NotI-NotI

ACCN:

NM_002361

Insert Size:

2440 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

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_002361.2](#), [NP_002352.1](#)

RefSeq Size: 2380 bp

RefSeq ORF: 1881 bp

Locus ID: 4099

UniProt ID: [P20916](#)

Cytogenetics: 19q13.12

Domains: ig, IGc2, IG

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Cell adhesion molecules (CAMs)

Gene Summary: The protein encoded by this gene is a type I membrane protein and member of the immunoglobulin superfamily. It is thought to be involved in the process of myelination. It is a lectin that binds to sialylated glycoconjugates and mediates certain myelin-neuron cell-cell interactions. Three alternatively spliced transcripts encoding different isoforms have been described for this gene. [provided by RefSeq, Nov 2010]

Transcript Variant: This variant (1) lacks exon 11 and has the stop codon in exon 12, as compared to variant 2. Isoform a is 44 aa longer and contains a different carboxy terminus when compared to isoform b.