

Product datasheet for **MG223754**

Mag (NM_010758) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mag (NM_010758) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Mag
Synonyms:	Gm; Gma; sigle; siglec-4a
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG223754 representing NM_010758
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGATATTCTCGCCACCCTGCCGTGTTTTGGATAATGATTTTCAGCTTCTCGAGGGGCCACTGGGGTG
 CCTGGATGCCCTCGACCATCTCAGCCTTCGAGGGCACGTGTCTCCATTCCCTGCCGTTTCGACTTCCC
 CGATGAGCTCAGACCGGCTGTGGTACATGGCGTCTGGTATTTCAATAGTCCCTACCCCAAGAACTACCCA
 CCGGTGGTCTTCAAGTCCCGCACACAAGTGGTCCATGAGAGTTTCCAGGGCCGAGCCGCCTATTGGGAG
 ACCTGGGCTACGAACTGTACCCTGCTTCTCAGCACACTGAGCCCCGAGCTGGGAGGCAATACTATTT
 CCGAGGCGACCTGGTGGCTACAACCAGTACACCTTCTCGGAGCACAGCGTCTGGACATCGTCAACACC
 CCCAACATTGTGGTTCCCCCGAAGTGGTGGCAGGAACGGAAGTGGAGGTCAGTTGTATGGTGCCGGACA
 ACTGCCAGAGCTGCGGCCAGAGCTGAGCTGGCTGGGCCACGAGGGGCTGGGAGAGCCACTGTGCTGGG
 TCGGCTGCGTGAAGGCACCTGGGTGCAGGTGTCGCTGCTACACTTCGTGCTACTAGAGAGGCC
 AACGGCCACCGTCTGGGCTGTCAGGCTGCCTTCCCAACACCACCTTGCAGTTCCGAGGGTACGCCAGTT
 TGGACGTCAGTACCCCCAGTGATTGTGGAGATGAATTCCTCTGTGGAGGCCATTGAGGGCTCCCATGT
 CAGCCTGCTGTGGGGCTGACAGCAACCCGCCCGCTGCTGACTTGGATGCGGGATGGGATGGTGTG
 AGGGAGGCAGTTGCCGAGAGCCTGTACCTGGATCTGGAGGAGGTGACCCAGGAGAGGACGGCGTCTATG
 CTTGCCTAGCAGAGAACCCTATGGCCAGGACAACCGCACGGTGGAGTGAAGTGTATGCACCTTG
 GAAGCCCCACAGTGAATGGGACGGTGGTGGCCGTAGAGGGGAGACTGTCTCTATCCTGTGTTCCACACAG
 AGCAACCCGACCCCATCCTTACCATCTCAAGGAGAAGCAGATCCTAGCCACGGTCATCTATGAGAGTC
 AGCTGCAGCTGGAACCTCCTGCAGTGACCCCGAGGATGATGGGAATACTGGTGTGGTGAGAACCA
 GTATGGCCAGAGAGCCACTGCCTTCAACCTGTCTGTGGAGTTTGGCCCCATAATCCTTCTGGAGTCACAC
 TGTGCAGCGGCCAGAGACACCGTGCAGTGTCTATGTGTGGTAAAAATCCAACCCGGAACCCCTGTGGCCT
 TTGAGCTGCCTTCCCGAACGTGACTGTGAATGAGACGGAGAGGGAGTTTGTGACTCCGAGCGCAGTGG
 CCTCCTGCTCACCAGCATCCTCACGATCCGGGGTCAAGCCCAAGCCCAAGCCCGCGTCAATTTGTACTCC
 AGGAACCTCTATGGCACCCAGAGCCTCGAGCTGCCTTCCAGGGAGCACACCGACTGATGTGGGCCAAAA
 TCGGCTCCTGTGGGTGCTGTGGTGCCTTTGCCATCCTGATTGCCATTGTGTGCTACATCACCCAGACGAG
 AAGAAAAAGAATGTACGGAGAGCTCCAGCTTCTCAGGGGAGACAACCCTCATGTCTGTACAGCCCC
 GAATTCAGAATCTCTGGGCACCTGATAAGTATGAGTCCAGAGAGTCTCTACCCGGATTGTAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG223754 representing NM_010758
 Red=Cloning site Green=Tags(s)

MIFLATLPLFWIMISASRGGHWGAWMPSTISAFEGTCVSIPCRFDPELPAVVHGVVYFNSPYKKNYP
 PVVFKSRTQVVHESFQGRSRLLDGLGRNCTLLSTLSPELGGKYYFRGDLGGYNQYTFSEHSVLDIVNT
 PNIVVPEVVAGTEVEVSCMVPDNCPELRPELSWLGHEGLGEPTVLGRLREDEGTWVQVLLHFVPTREA
 NGHRLGCQAAPNTTLQFEGYASLDVKYPPVIVEMNSSVEAIEGSHVSLLCGADSNPPPLLTWMRDGMVL
 REAVAESLYLDLEEVTGEGDGVYACLAENAYQDNRTVELSVMYAPWKPTVNGTVVAVEGETVSILCSTQ
 SNPDPILTIFKEKQILATVIYESQLQLELPAVTPEDDGEYWCVAENQYQQRATAFNLSVEFAPIILLES
 CAAARDTVQCLCVVKSNPESVAFELPSRNVTVNETEREFVYSERSGLLLTSILTIRGQAQAPPRVICTS
 RNLYGTQSLLELFPQGAHRLMWAIGPVGAVVAFAILIAIVCYITQTRRKNVTESSFSGGDNPHVLYSP
 EFRISGAPDKYESREVSTRDCH

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_010758

ORF Size: 1746 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_010758.2](#), [NP_034888.1](#)

RefSeq Size: 2427 bp

RefSeq ORF: 1749 bp

Locus ID: 17136

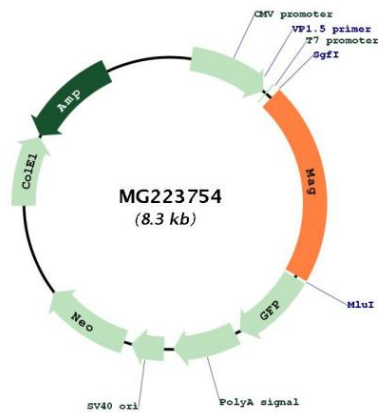
UniProt ID: [P20917](#)

Cytogenetics: 7 19.26 cM

Gene Summary:

This gene encodes a type I membrane protein and member of the immunoglobulin-like superfamily. It is expressed in myelinating glial cells, including oligodendrocytes of the central nervous system and Schwann cells of the peripheral nervous system. Mice lacking the encoded protein express abundant myelin, but suffer long-term axon degeneration, altered distribution of channels and adhesion molecules at nodes of Ranvier, and altered axon cytoskeletal structure. While not required for myelination, the encoded protein enhances axon-myelin stability, helps to structure nodes of Ranvier, and regulates the axon cytoskeleton. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2016]

Product images:



Circular map for MG223754