

## Product datasheet for **MG209054**

### **Msn (NM\_010833) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Msn (NM_010833) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Msn
Synonyms:	C78546
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG209054 representing NM\_010833  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGCCGAAGACGATCAGTGTGCGTGTACCACCATGGATGCAGAGCTGGAGTTTGCCATTACGCCAACAA  
 CCACTGGCAAGCAGCTGTTTGACCAGGTGGTGAAGAACTATTGGTTTGAGGGAAGTTTGGTCTTTGGTCT  
 GCAGTACCAGGACACAAAAGCTTCTCTACTTGGCTGAAACTCAATAAGAAGGTGACTGCACAGGATGTG  
 CGGAAGGAAAAGTCCATTGCTCTTCAAGTCCGGGCAAGTTCTACCCAGAGGATGTATCTGAAGAACTGA  
 TCCAGGATATCACCCAGCGCCTGTTCTTTCTGCAAGTGAAGGAGGGCATTCTCAATGACGACATTTACTG  
 TCCACCTGAAACTGCGGTCTGTTGGCTTCTTATGCCGTCCAGTCTAAGTATGGTACTTCAATAAGGAA  
 GTGCACAAGTCTGGCTACCTGGCTGGAGATAAGTTGCTTCCCAAAGAGTCTGGAGCAGCACAACTCA  
 ACAAGGACCAGTGGGAAGAGAGGATCCAGGTGTGGCATGAGGAGCACCGGGCATGCTCAGGGAGGATGC  
 TGTCTGGAATATCTCAAGATTGCTCAAGACCTGGAAATGTATGGTGTGAACTATTTTCAGCATCAAGAAC  
 AAGAAAGGCTCAGAGCTATGGCTGGGCGTGGATGCCTTGGGTCTCAACATCTATGAGCAGAATGACAGAC  
 TGACTCCTAAGATTGGCTTCCCCTGGAGTAAAATCAGGAATATCTCTTTCAATGATAAGAAATTTGTCAT  
 CAAGCCCATTGACAAAAAGGCCCGGACTTTGTGTTCTATGCTCCCCGGCTTCGGATTAACAAGCGGATC  
 TTGGCCCTGTGCATGGGAAATCATGAGCTGTACATGCGTCCGGCGCAAGCCTGACACCATTGAGGTGCAGC  
 AGATGAAGGCCAGGCTCGGGAAGAGAAGCACCAGAAGCAGATGGAGCGTCTCTCTGGAAAATGAGAA  
 GAAGAAGCGTGAGCTGGCTGAGAAAGAGAAGGAGAAGATTGAGCGGGAGAAGGAAGAGCTGATGGAGAAG  
 CTGAAGCAGATTGAGGAGCAGACTAAGAAGGCTCAGCAAGAGCTGGAAGAGCAGACCCGAGGGCCCTAG  
 AACTTGAGCAGGAACGGAAAGCGTCCCAGAGTGAAGCCGAAAAGCTAGCCAAGGAGCGTCAAGAAGCTGA  
 AGAAGCCAAAGAGGCCCTGCTGCAGGCTTCTCGGGACCAGAAGAAGACCCAGGAACAGCTGGCTTCAGAA  
 ATGGCAGAGCTGACGGCACGGATCTCCCAGTTGAAAATGGCTCGAAAGAAGAAAGTGAAGGCTGTGG  
 AATGGCAGCAAAAAGGCCAGATGGTACAGGAAGACTTGGAGAAGACTCGTGCTGAGCTGAAGACTGCCAT  
 GAGTACACCTCATGTGGCAGAGCCTGCTGAGAATGAACATGATGAGCAGGATGAGAATGGAGCAGAGGCC  
 AGTGCCGAGCTGCGGGCTGATGCTATGGCAAGGACCGCAGTGAAGGAAACGTACCACTGAGGCAGAGA  
 AGAATGAGCGTGTGAGAAGCATCTGAAGGCCCTTACTTCAGAGCTGGCCAATGCCCGAGATGAGTCCAA  
 GAAGACTGCCAATGACATGATCCATGCTGAGAACATGCGACTGGGACGAGACAAATACAAGACCCTGCGC  
 CAGATCCGGCAGGGCAACACCAACAACGCATTGATGAGTTTGAAGTCCATG

**ACGCGTACGCGGCCGCTCGAG** – GFP Tag – GTTTAA

**Protein Sequence:**

>MG209054 representing NM\_010833  
 Red=Cloning site Green=Tags(s)

MPKTISVRVTMDAELEFAIQPNTTGKQLFDQVVKTIGLREVWFFGLQYQDTKAFSTWLKLNKKVTAQDV  
 RKESPLLFKFRKFPYEDVSEELIQDITQRLFFLQVKEGILNDDIYCPPEAVLLASYAVQSKYGDFNKE  
 VHKSGYLKLLPQRVLEQHKLNKQWEERIQQVWHEEHRGMLREDAVLEYLKIAQDLEMYGVNYFSIKN  
 KKGSELWLGVDALGLNIYEQNDRLTPKIGFPWSEIRNISFNDDKFKVFKPIDKKAPDFVYAPRLRINKRI  
 LALCMGNHEL YMRRRKPDTEIVQQMKAQAREEKHQKQMERALLENEKKKRELAKEKEKIEREKEELMEK  
 LKQIEEQTKKAQQELEEQTRRALELEQERKRAQSEAEKLAKERQEAEEAKEALLQASRDQKKTQEQLASE  
 MAELTARISQLEMARKKKESEAVEWQQKAQMVQEDLEKTRAELKTAMSTPHVAEPAENEHDEQDENGAEA  
 SAELRADAMAKDRSEERTTEAEKNERVQKHLKALTSSELANARDESCKTANDMIHAENMRLGRDKYKTLR  
 QIRQGNTKQRIDEFESM

**TRTRPLE** – GFP Tag – V

**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:



ACCN: NM\_010833

ORF Size: 1731 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](mailto: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](#)

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\\_010833.2, NP\\_034963.2](#)  
**RefSeq Size:** 3840 bp  
**RefSeq ORF:** 1734 bp  
**Locus ID:** 17698  
**UniProt ID:** [P26041](#)  
**Cytogenetics:** X C3

**Gene Summary:** Ezrin-radixin-moesin (ERM) family protein that connects the actin cytoskeleton to the plasma membrane and thereby regulates the structure and function of specific domains of the cell cortex. Tethers actin filaments by oscillating between a resting and an activated state providing transient interactions between moesin and the actin cytoskeleton (By similarity). Once phosphorylated on its C-terminal threonine, moesin is activated leading to interaction with F-actin and cytoskeletal rearrangement (By similarity). These rearrangements regulate many cellular processes, including cell shape determination, membrane transport, and signal transduction (By similarity). The role of moesin is particularly important in immunity acting on both T and B-cells homeostasis and self-tolerance, regulating lymphocyte egress from lymphoid organs (PubMed:22875842). Modulates phagolysosomal biogenesis in macrophages (PubMed:28978692). Participates also in immunologic synapse formation (By similarity).[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MG209054