

Product datasheet for **MR209238**

Miga2 (NM_175392) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	Miga2
Synonyms:	5730472N09Rik; AA408683; AI790341; C9orf54; Fam73b; R74766
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



ORF Nucleotide Sequence: >MR209238 representing NM_175392
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGCATTCCGGAGGACTGAGGGTATGTCCATGATCCAGGCTCTGGCCATGACTGTGGCTGAGATTCCAG
 GTTCTCTGTACACAACCTTTGGTCAGTCCGCTTCTCCAGCTGCGGTTGACACCGGGCCTGAGGAAGGT
 TCTTTTGGCAGACCCCTTGGGACTGTGGCCTTGGCCCTGGCTGCCACCAGCTGAAAAGGCCCGCGG
 AAGAAGAAGCAGGTGGGCCCTGAGATGGGAGGTGAGCAGCTGGGCACGGTGCCCATGCCATCTCATGG
 CCCGCAAGGTCCCTTCGGTGAAGAAAGGCTGCTCCAGCAGGAGGGTTGAGAGCCCGAGCAGCAAGAGCAA
 CGACACTCTTAGTGGCATCTCTCCATCGAGCCAGCAAGCACTCAGGCTCTCCACAGCCTGGCCTCG
 ATGGTAGTGGTCAATTCATCCAGCCCTACAGCTGCGTGCTCAGGTTTATGGGAAGCCGAGGGATGGAGG
 AGTCTGTGCCACCACTGATGGCAGTGCCGAGAGCCTCTATGTGCAAGGCATGGAGCTGTTTGAGGAAGC
 CCTGCAGAAATGGGAGCAGGCACTGAGTGTGGGCCAGAGAGGGGATGGAGGCAGACCCCCACACAGGC
 GACAGCTCCAGAACCCAGACCCGCATCAGAAGCACTGTGAGAGCCAGAGTCCCAACGAAGGGAGTTTG
 CTGAGAAGCTGGAGTCCCTGCTGCACCGGGCCTACCACCTGCAGGAAGAGTTTGGCTCTACCTTCCCTC
 TGACAGCATGCTGTTGGATCTTGAGAGGACCTAATGCTGCCACTGACTGAGGGCTCACTGCGACTTCGA
 GCTGACGATGAGGACAGCCTGACCTCTGAAGACTCCTTTTCTCAGCCACTGAGATCTTTGAGTCCCTGC
 AGATCGGCGAGTACCGCTTCTCTCTCCAGGCTGCTGCTGCTACGAGGAGGCTCTGCAGCTGGTGAA
 GGAAGGAAGAGTCCCTTCCGAACACTCAGGACAGAGCTGCTGGGCTGCTACAGTGACCAGGACTTCCTA
 GCCAAGCTGCATTGTGTACGGCAGGCTTTGAGGGCTTCTAGAAGAAAGCAAGCAAGCAGATCTTCTTTG
 GGGAGTTCGGCCGCGAGATGGTGACGGCCTGATGACCAAGGCTGAGAAGAGTCCAAAGGCTTCTGGA
 GAGCTATGAGGAGATGCTGAGCTACGCCCTGCGGCTGAGACTGGGCTACCACCGGCTGGAGCTGGAG
 GGCAGAGGGGTGGCTGCATGAGCTTCTTCGACATCGTGCTGGACTTCATCCTCATGGATGCCTTTGAGG
 ACCTAGAGAACCCTCCGCTTTCGGTGCTTGTCTGCTGAGGAACCGCTGGCTGTCTGACAGCTTCAAAGA
 AACAGCCCTAGCCACCGCTGCTGGTCTGCTGCTGAAAGCCAGAGGAGGCTCCTGATGGTGCCTGATGGC
 TTCATCTCCATTCTACTCCGTATCGGAGCATGTTAGCCCTGTGTTGGCTTTGGCTTCTCGGACCCA
 AGCCCCAGCTCTCGGAAGTCTGTGCTTCTCAAGCACCAGATTGTACAATACCTGAGGGACATGTTTGA
 CCTGGACAACGTGCGCTACACATCTGTGCCAGCCCTAGCAGAAGACATCTACAGCTGTCCCGCGGCGC
 AGCGAGATTCTATTGGGCTACCTGGGGCACCTGTGGCTAGTAGCATCGGGCTGAATGGGCACTGCCTC
 GAGAAATGGGCCCTGGAAGAGCTGACG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR209238 representing NM_175392
 Red=Cloning site Green=Tags(s)

MAFRRTGSMIQLAMTVAEIPVFLYTTFGQSAFSQLRLTPGLRKVLFATALGTVALALAAHQLKRRRR
 KKKQVGPMPGGEQLGTVPMPILMARKVPSVKKGCSSRRVQSPSSKNDTSLGSISSIEPSKHSGSSHLAS
 MVVNNSSPTAACSGSWEARGMEESVPTTDGSAESLYVQGMELFEEALQKWEQALSVQQRGDGGSTPTPG
 DSLQNPDTASEALSEPESQRREFAEKLESLHRAHYLQEEFGSTFPSDSMLLDLERTLMLPLTEGSLRLR
 ADDEDSLTSDFSSEIFESLQIGEYPLPLSRPAAAYEALQLVKEGRVPCRTLRELLGCYSDQDFL
 AKLHCVRAFEGLLEERSNQIFFGEVGRQMTGLMTKAEKSPKGFLESYEEMLSYALRPETWATTRELE
 GRGVACMSFFDIVLDFILMDAFEDLENPPSSVLAVLRNRWLSDFKETALATACWSVLKAKRRLLMVDPG
 FISHFYSVSEHVPVLAFFGLGPKPQLSEVCAFFKHQIVQYLRDMFDLDNVRYTSVPALAEIDLQSRRL
 SEILLGYLGAPVASSIGLNGPLPRENGPLEELQ

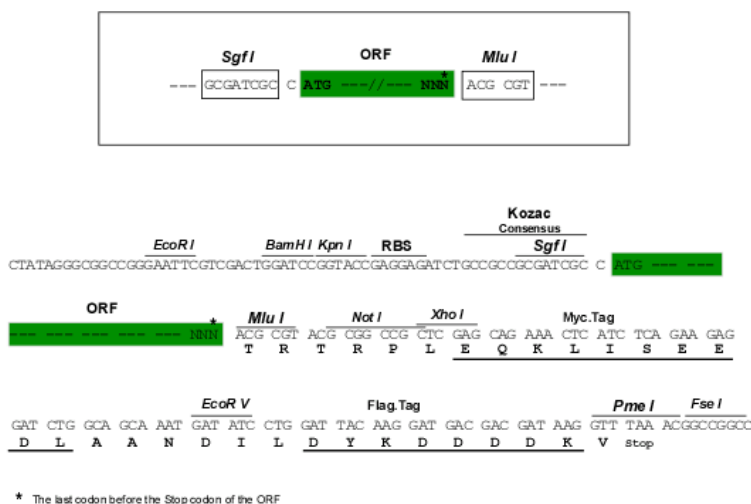
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9045_e07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN: NM_175392

ORF Size: 1779 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22µm filter is required.

RefSeq: NM_175392.3, NP_780601.1

RefSeq Size: 3584 bp

RefSeq ORF: 1782 bp

Locus ID: 108958

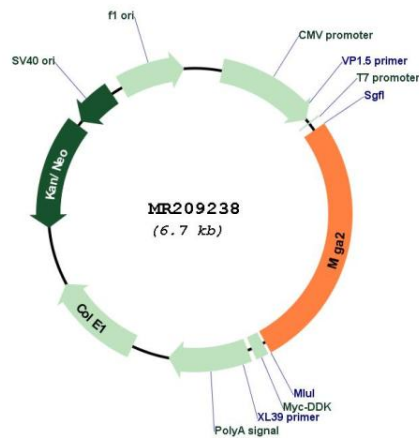
UniProt ID: [Q8BK03](#)

Cytogenetics: 2 B

MW: 66 kDa

Gene Summary: Regulator of mitochondrial fusion (PubMed:26711011). Acts by forming homo- and heterodimers at the mitochondrial outer membrane and facilitating the formation of PLD6/MitoPLD dimers. May act by regulating phospholipid metabolism via PLD6/MitoPLD (By similarity). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR209238