

## Product datasheet for **MR219873**

### Mia2 (NM\_177321) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Mia2 (NM_177321) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mia2
Synonyms:	Ctage5; D12Bwg0579e; Mea6; Mgea; Mgea6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR219873 representing NM\_177321  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCGGAAGTCAGTGTTCAAAGAATCCTTCTTTTGGTTGTTTCTCTGGCCAAGTGTCTGGAGGGTACAA  
 AGTTGCTGGCACACCTTAAGAAGTGTGGTACTTGAATGTGAACTTTGATCAGCCGAGTCTTAGCCCT  
 GAGAGATTACACAGGACCCGACTGTCGGTACCTGAACTTCACTACGGGAGAAGAGATATCTGTTTATGTT  
 AAAGTTGGAGGAGACAGAGAAGATTTGTGGCAGGAAGCAAAGGAAAAGACTTTGGATTTTTTCCAGAG  
 ATGCAGTCGAGATTGAAGAGGTGTTTATCTGAAGAAGTCGAAATGCCAACTAAATCTGACTTTCTTTG  
 TCTTCTGGAGAAGGCTACATATTTGGAAGTGAACAGAGTGAATTAACAGTGAAGATGATGAAGAACAT  
 ATGTACCCATATGAAAAGATGAAGACCAAACTATAATATATAGGGTGATTTTCAGCCAGAACCTG  
 ACTTATATGCAGCTGCTGAAGGGACTTTGTTGGAGGACCAAAATCCAGCATCCGAAGCTCCTGATGATT  
 CCGATTCTCCAGTGAGTGAAGGCTGGGAAGGGGCTGGAAGCCAGGGTGGAGGGGAGCAGGATTACACT  
 GCAGACTCTGACCAAGACTTGCCATCCCTCAGTAAGCCAGAAAGCAAGGATGGTTTGGCCTGGGGACAG  
 AAGAAGCTGAAGAGAAGTTTTTCGAATCAGATACTGAACCTACACAAGAATTAGCACTAGAAAGAGGAG  
 TGACCTGGAGAAATTACACAGTGGCAACCCCAAGTGAAGTGGCAAGAGCCAAAATCAGAGACATTA  
 GAATTCAGTTCAGTGCCGGACGAAGAGTATGAGCTAGAATCTGAGACGGAGAGTATCCTCAAACCCCAAG  
 CTTCTGGCTGGTTTGGTGAAGGCTTACAAGTTATTTAGGTTTTGGAAATGAGGAGGCAGGACTTGAGTT  
 ATGTCCAAAGAAAGCAATCCACCATTACAAGATTTCCAGCTCTGTTCCACCAGATGAAGAAGTCCCG  
 GCTCCATGCAGAGAAATCTCAACAGACAAGGAAGATGCAGTCATTAATGATAGCTCGGTTCTCAGTCCAA  
 GCTGGTTTTACTATGGATTTGGTATGCTAGGCTTACAATGCCGACGAAGACAACATTTGTTCCAGACAA  
 AGGAGAAAATGAAGATGGTGAAGTAGATAACCTCAAACATCCTATAGGAAGTGACTTTGACCCTGAAAAG  
 GAACAAGAAAGGAAAATAGTAACTGTGGAACCGAAGACCAGGCAGGTACAGAAAGCGTCTTGGAGAAGA  
 CAGACGAGTCTGGTTCCATGCAGTATCTGAAGAAGTCTTTGATAATCCTTGGGGCTTCCAGAGTCTCC  
 AGAGGACACAGAATTACCATTTTCCAAAAGATGCTGGATCAAGATGATATAGTAGAAAATGACAAAATT  
 GAAGAATTTCCACTGAAAATTTCCCACAGGTAGCATGAAAGACCCCGTATGCTGGCGAGCAGATACG  
 TTCTGTCAGGT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR219873 representing NM\_177321  
 Red=Cloning site Green=Tags(s)

MAEVSVQRILLLVVSLAKCLEGTLKLLAHLKKGDLCEETLISRVLALRDYTGPDCRYLNFTTGEISVYV  
 KLGDDREDLWAGSKGKDFGFPRDAVEIEEVFISEEVEMPTKSDFLCLLGEYIFGSEQSELNSEDDEEH  
 MYPYEKDEDQNYNIYEGDFQPEPDLAAAEGTLLEDQIPASEAPDDFRFSSEWKAWEGAGSQGGGEQDYT  
 ADSDQDLPSLSKPERQGWFLGTEEAEEKVFESDTEPTQELALEEESDLEKLHSGEPQVELEQEPKSETL  
 EFSVPPDEEYELESETESILKPQASGWFGELTSLYLGFGNEEAGLELLSKESNPPLQDIPSSVPPDEEVP  
 APCREISTDKEDAVINDSSVLSPSWFYYFGMLGFTNADEDNIVSDKGENEDGEVDNLKHPIGSDFDPEK  
 EQERKIVTVETEDQAGTESVLEKTDES GSMQYLKFFDNPWGFQSLPEDTELPSKMLDQDDIVENDKI  
 EELSTENSPTGSMKDPVMLASRYVLSG

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mm9006\\_g06.zip](https://cdn.origene.com/chromatograms/mm9006_g06.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_177321

**ORF Size:** 1551 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\\_177321.2](#), [NP\\_796295.1](#)

**RefSeq Size:** 1628 bp

**RefSeq ORF:** 1554 bp

**Locus ID:** 338320

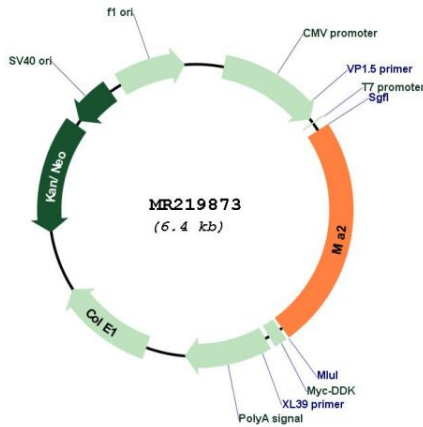
**UniProt ID:** [Q91ZV0](#)

**Cytogenetics:** 12 C1

**MW:** 58.2 kDa

**Gene Summary:** This gene encodes a protein that is involved in endoplasmic reticulum-to-Golgi trafficking and regulation of cholesterol metabolism. Three major classes of transcripts are generated from this gene- melanoma inhibitory activity 2-specific transcripts, cTAGE family member 5-specific transcripts and transcripts that include exons from both these transcript species. Additionally, alternative splicing in these transcripts results in multiple transcript variants encoding diverse isoforms. A mutation in this gene (couch-potato or cpto) may result in low levels of plasma cholesterol and triglycerides. [provided by RefSeq, Sep 2016]

**Product images:**



Circular map for MR219873