

## Product datasheet for MR202529

### Mymk (NM\_025376) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Mymk (NM_025376) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mymk
Synonyms:	1110002H13Rik; A1131587; myomaker; Tmem8c
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR202529 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGGGGACAGTTGTAGCCAAACTGCTCCTGCCTACCCCTCAGCAGCCTGGCCTTCCTCCCGACAGTGAGCATCGCTACCAAGAGGCGTTTCTACATGGAGGCCATGGTCTACCTCTTCACCATGTTCTTTGTGGCGTTCTCCATGCCTGTGATGGCCTGGTTTGTCTGTGCTGTGCTTCATGCGCCGTGACATTCTGGAGTACTCAGCATCTATGGAACAGCCCTGAGCATGTGGGTCTCCCTGATGGCACTGGCCGACTTTGATGAACCCAGAGATCGACCTTCACAATGCTTGGCGTCTTACCATCGCTGTGCGGACTTTTCATGACCGCTGGGTTACGGGTATACTCCGGTCCCATAGGCACGGCCACCCCTCATATTGCTGTAAAAGTGGCTGAAGAAGATGAAAGAGAAGAAGGGCCTGTACCCCGACAAGAGCATCTACCCAGCAGATAGGCCCGCCCTGTGCTTTGGGGCCCTGGCCCTGATGCTTCGATTCTTTTGGAGGAATGGGATTACACCTACGTCCACAGTTCTACCACTGTGCCCTGGCCATGTCTTTGCTGCTGCTGCCAAGGTCAACAAGAAGGCTGGGAACGCAGGGGCCCCCGCCAAGCTGACCTTCTCCACCCTCTGCTGCACTTGTGTC

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR202529 protein sequence  
Red=Cloning site Green=Tags(s)

MGTVVAKLLLPTLSSLAFLPTVSIATKRRFYMEAMVYLFTMFFVAFSHACDGPGLSVLCFMRRDILEYFS  
 IYGTALSMWVSLMALADFDEPQRSTFTMLGVLTIIVRTFHDRWGYGVYSGPIGTATLIIIVKWLKKMKEK  
 KGLYPDKSIYTQQIGPLCFGALALMLRFFFEEDWYTYVHSFYHCALAMSFVLLLPKVNKKAGNAGAPAK  
 LTFSTLCCTCV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



**ACCN:** NM\_025376

**ORF Size:** 666 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\\_025376.3](#)

**RefSeq Size:** 1401 bp

**RefSeq ORF:** 666 bp

**Locus ID:** 66139

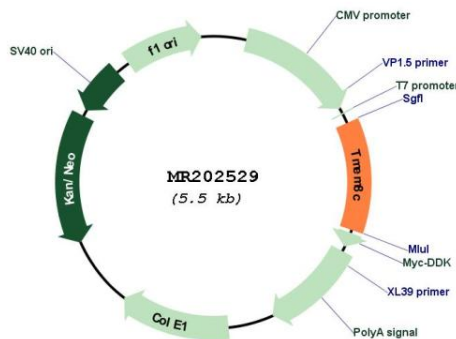
**UniProt ID:** [Q9D1N4](#)

**Cytogenetics:** 2 A3

**MW:** 24.8 kDa

**Gene Summary:** Myoblast-specific protein that mediates myoblast fusion, an essential step for the formation of multi-nucleated muscle fibers (PubMed:23868259, PubMed:28386024, PubMed:28681861, PubMed:30197239). Actively participates in the membrane fusion reaction by mediating the mixing of cell membrane lipids (hemifusion) upstream of MYMX (PubMed:30197239). Acts independently of MYMX (PubMed:30197239). Involved in skeletal muscle regeneration in response to injury by mediating the fusion of satellite cells, a population of muscle stem cells, with injured myofibers (PubMed:25085416). Also involved in skeletal muscle hypertrophy, probably by mediating the fusion of satellite cells with myofibers (PubMed:28186492). [UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR202529