

## Product datasheet for **MR222017**

### **Dmpk (NM\_032418) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Dmpk (NM_032418) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Dmpk
Synonyms:	DM; Dm15; DMK; MDPK; MT-PK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MR222017 representing NM\_032418.  
 Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGCACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGCATCGCC
ATGTCAGCCGAAGTGC GGCTGAGGCAGCTCCAGCAGCTGGTGCTGGACCCAGGCTTCTCTGGGACTGGAG
CCCCTGCTCGACCTTCTCTGGGCGTCCACCAGGAGCTGGGTGCCTCTCACCTAGCCAGGACAAGTAT
GTGGCCGACTTCTTGCAGTGGGTGGAGCCATTGCAGCAAGGCTTAAGGAGGTCCGACTGCAGAGGGAT
GATTTTGAAGATTTTGAAGGTGATCGGGCGTGGGCGTTCAGCGAGGTAGCGGTGGTGAAGATGAAACAG
ACGGGCCAAGTGTATGCCATGAAGATTATGAATAAGTGGGACATGCTGAAGAGAGGCGAGGTGTCGTGC
TTCGGGAAGAAAGGGATGTATTAGTGAAGGGGACCGGCGCTGGATCACACAGCTGCACCTTTCCTTC
CAGGATGAGAACCTGTACCTGGTATGGAATACTACGTGGGCGGGGACCTGCTAACGCTGCTGAGC
AAGTTTGGGGAGCGGATCCCGCCGAGATGGCTCGCTTCTACCTGGCCGAGATTGTCATGGCCATAGAC
TCCGTGCACCGGCTGGGCTACGTGCACAGGACATCAAACCAGATAACATTCTGCTGGACCGATGTGGG
CACATTCGCTGGCAGACTTCGGCTCCTGCCTCAAACCTGCAGCCTGATGGAATGGTGGGCTCGTGGTG
GCTGTGGGCACCCCGACTACCTGTCTCCTGAGATTCTGCAGGCCGTTGGTGGAGGGCCTGGGGCAGGC
AGCTACGGGCCAGAGTGTGACTGGTGGGCACTGGGCGTGTTCGCCTATGAGATGTCTATGGGCAGACC
CCCTTCTACGCGGACTCCACAGCCGAGACATATGCCAAGATTGTGCACTACAGGGAACACTTGTCTGCTG
CCGCTGGCAGACACAGTTGTCCCGAGGAAGCTCAGGACCTCATTCTGTTGGCTGCTGTGCTCTGCTGAG
ATAAGGCTAGGTGAGGTGGGGCAGGTGATTTCCAGAAACATCCTTTCTTCTTTGGCCTTGATTGGGAG
GGTCTCCGAGACAGTGTACCCCTTTACACCAGACTTCGAGGGTGCCACGGACACATGCAATTCGAT
GTGGTGGAGGACCGGCTCACTGCCATGGTGAGCGGGGGCGGGGAGACGCTGTGAGACATGCAGGAAGAC
ATGCCCCTTGGGTGCGCTGCCCTCGTGGGCTACTCCTACTGCTGCATGGCCTTCAGAGACAATCAG
GTCCCGGACCCACCCCTATGGAAGTACAGGCCCTGCAGTTGCCTGTGTCAGACTTGAAGGGCTTGAC
TTGCAGCCCCAGTGTCCCACCGGATCAAGTGGCTGAAGAGGCTGACCTAGTGGCTGTCCCTGCCCT
GTGGCTGAGGCAGAGACCAGGTAACGCTGCAGCAGCTCCAGGAAGCCCTGGAAGAAGAGGTTCTCACC
CGGCAGAGCCTGAGCCGCGAGCTGGAGGCCATCCGGACCGCAACCAGAACTTCTCCAGCCAACTACAG
GAGGCCGAGGTCCGAAACCGAGACCTGGAGGCGCATGTTCCGAGCTACAGGAACGGATGGAGATGCTG
CAGGCCCCAGGAGCCGACGCCATCACGGGGTCCCGAGTCCCGGGCCACGGATCCACCTTCCCCTA
GATGGCCCCCGCCGTGGCTGTGGGCCAGTCCCGCTGGTGGGGCCAGGCCCATGCACCGCCGTAC
CTGCTGCTCCCTGCCAGGATCCCTAGGCCCTGGCCTATCCGAGGCGGTTGCTGCTCCTGTTCCGCCCT
GCTCTGGCTGCTCCGCCACACTGGGCTGCACTGGGTTGGTGGCCTATACCGGCGGTCTACCCAGCT
TGGTGTTCGCGGGAGCCACCTTCGCCCC
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
```

**Protein Sequence:**

>Peptide sequence encoded by MR222017  
 Blue=ORF Red=Cloning site Green=Tag(s)

```
MSAEVRLRQLQQLVLDPGFLGLEPLDLLLVHQLGASHLAQDKYVADFLQWVEPIAARLKEVRLQRD
DFEILKIVIGRAFSEVAVVYVYVGGDLLTLLSKFGERIPAEMARFYLAIEIVMAIDSVHRLGYVHRDIKPDNILLDRCG
HIRLADFGSCLKLQPDGMVRSLLVAVGTPDYLSPHILQAVGGGPGAGSYGPECDWWALGVFAYEMFYGQT
PFYADSTAETYAKIVHYREHLSLPLADTVVPEEAQDLIRGLLCPAEIRLGRGGAGDFQKHPFFFGLDWE
GLRDSVPPFTPDFEGATDTCNFDVVEDRLTAMVSGGTELSDMQEDMPLGVRLPFVGYSYCCMAFRDNQ
VPDPTPMELEALQLPVSDLQGLDLQPPVSPDQVAEEADLVAVPAPVAEATTVTLQQLQEALEEEVLT
RQSLSRELEAIRANQNFSSQLQEAEVNRDLEAHVRQLQERMELQAPGAAAITGVPSPRATDPPSHL
DGPPAVAVGQCPLVGPMPHRRHLLLPARIPRPLSEARCHLLFAAALAAATLGTGLVAYTGGLTPV
WCFPGATFAP
TRTRPLEQKLISEEDLAANDILDYKDDDDKV
```

Recombinant protein using MR222017 also available, [TP522017](#)

Chromatograms: [https://cdn.origene.com/chromatograms/mm9009\\_h05.zip](https://cdn.origene.com/chromatograms/mm9009_h05.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_032418

ORF Size: 1893 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\\_032418.3](#)

RefSeq Size: 2761 bp

RefSeq ORF: 1896 bp

Locus ID: 13400

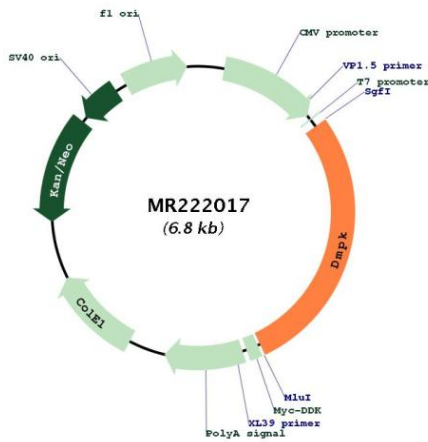
UniProt ID: [P54265](#)

Cytogenetics: 7 9.46 cM

MW: 69.6 kDa

**Gene Summary:** The protein encoded by this gene is a serine/threonine protein kinase that contains coiled-coil and C-terminal membrane association domains. In the embryonic mouse, it is found in cardiac and skeletal myocytes where it appears to play a role in myogenesis. In adults, the transcript is localized to several tissues including brain, heart, and skeletal and smooth muscle, and a function in cytoskeletal remodeling has been described. Transcripts with expanded CUG repeats in the 3' untranslated region mediate alternative splicing of several genes and sequester RNA binding proteins and RNA transcripts that contain CAG repeats, resulting in myotonic dystrophy, an autosomal dominant neuromuscular disorder. Alternative splicing results in multiple protein coding and non-coding transcript variants. [provided by RefSeq, Oct 2014]

**Product images:**



Circular map for MR222017