

Product datasheet for **MR222018**

Dmpk (NM_001190490) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dmpk (NM_001190490) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Dmpk
Synonyms:	DM; Dm15; DMK; MDPK; MT-PK
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>MR222018 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGTCAGCCGAAGTGC GGCTGAGGCAGCTCCAGCAGCTGGTGTGCTGGACCCAGGCTTCTGGGACTGGAGC
 CCCTGCTCGACCTTCTCCTGGGCGTCCACCAGGAGCTGGGTGCCTCTCACCTAGCCAGGACAAGTATGT
 GGCCGACTTCTTGCAGTGGTGGAGCCATTGCAGCAAGGCTTAAGGAGGTCCGACTGCAGAGGGATGAT
 TTTGAGATTTTGAAGGTGATCGGGCGTGGGGCGTTGAGCGAGGTAGCGGTGGTGAAGATGAAACAGACGG
 GCCAAGTGTATGCCATGAAGATTATGAATAAGTGGGACATGCTGAAGAGAGGGCGAGGTGTCGTGCTTCCG
 GGAAGAAAGGGATGATATTAGTAAAGGGGACCGGCGCTGGATCACACAGCTGCACCTTTCCTCCAGGAT
 GAGAACTACCTGTACCTGGTCATGGAATACTACGTGGCGGGGACCTGCTAACGCTGCTGAGCAAGTTT
 GGGAGCGGATCCCGCCGAGATGGCTCGCTTCTACCTGGCCGAGATTGTCATGGCCATAGACTCCGTGCA
 CCGGCTGGGCTACGTGCACAGGGACATCAAACCAGATAACATTCTGCTGGACCGATGTGGGCACATTCCG
 CTGGCAGACTTCCGCTCCTGCCTCAAACCTGCAGCCTGATGGAATGGTGGAGTCCGCTGGTGGCTGTGGGCA
 CCCCAGACTACCTGTCTCCTGAGATTCTGCAGGCCGTTGGTGGAGGGCCTGGGGCAGGCAGCTACGGGCC
 AGAGTGTGACTGGTGGGCACTGGGCGTGTTCGCCTATGAGATGTTCTATGGGCAGACCCCTTCTACGCG
 GACTCCACAGCCGAGACATATGCCAAGATTGTGCACTACAGGGAACACTTGTGCTGCCGCTGGCAGACA
 CAGTTGTCCCCGAGGAAGCTCAGGACCTCATTGCTGGGCTGCTGTGCTGCTGAGATAAGGCTAGGTGCG
 AGGTGGGCAGACTTCGAGGGTCCACGGACACATGCAATTTTCGATGTGGTGGAGGACCGGCTACTGCC
 ATGGTGAGCGGGGGCGGGGAGACGCTGTCAGACATGCAGGAAGACATGCCCTTGGGGTGGCCTGCCCT
 TCGTGGGCTACTCCTACTGCTGCATGGCCTTCAGAGACAATCAGGTCCCGGACCCACCCCTATGGAAT
 AGAGGCCCTGCAGTTGCCTGTGTGTCAGACTTGAAGGGCTTGAAGTGCAGCCCCAGTGTCCACCGGAT
 CAAGTGGCTGAAGAGGCTGACCTAGTGGCTGTCCCTGCCCTGTGGCTGAGGCAGAGACCACGTAACGC
 TGCAGCAGCTCCAGGAAGCCCTGGAAGAAGAGTTCTCACCCGGCAGAGCCTGAGCCGCGAGCTGGAGGC
 CATCCGGACCGCAACCAGAACTTCTCCAGCAACTACAGGAGCCGAGGTCCGAAACCAGACCTGGAG
 GCGCATGTTCCGAGCTACAGGAACGGATGGAGATGCTGCAGGCCCCAGGAGCCGAGCCATCACGGGGG
 TCCCCAGTCCCCGGGCCACGGATCCACCTTCCCATCTAGATGGCCCCCGGCGTGGCTGTGGCCAGTG
 CCCGCTGGTGGGGCCAGGCCCATGCACCGCCGTCACTGCTGCTCCCTGCCAGGATCCCTAGGCCTGGC
 CTATCCGAGGCGGTTGCCTGCTCCTGTTCCGCGCTGCTCTGGCTGCTGCCGCCACACTGGGCTGCACTG
 GTTGGTGGCCTATACCGCGGCTCACCCAGTCTGGTGTTCGCGGGAGCCACCTTCGCCCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR222018 protein sequence
 Red=Cloning site Green=Tags(s)

MSAEVRLRQLQQLVLDPGFLGLEPLDLLLVGHQELGASHLAQDKYVADFLQWVEPIAARLKEVRLQRDD
 FEILKVIIRGAFSEVAVVKMKQTGQVYAMKIMNKWMLKRGEVSCFREERDVLVKGDRRWITQLHFAFQD
 ENYLVLVMEYYVGGDLLTLLSKFGERIPAEMARFYLAELVMAIDSVHRLGYVHRDIKPDNILLDRCGHIR
 LADFGSKLKLQPDGMVRSLVAVGTPDYLSPEILQAVGGPGAGSYGPECDWWALGVFAYEMFYGQTPFYA
 DSTAETYAKIVHYREHLPLADTVVPEEAQDLIRGLLCPAEIRLGRGGADFEGATDTCNFDVVEDRLTA
 MVS GGGETLSDMQEDMPLGVRLPFVGYSYCCMAFRDNQVPDPTMELEALQLPVSDLQGLDLQPPVSPPD
 QVAEEADLVAVPAPVAEAEETTTLQQLQEALEEEVLTRQSLSRELEAIRTANQNFSSQLQEAEVNRNDRLE
 AHVRQLQERMMLQAPGAAAITGVPSPRATDPPSHLDGPPAVAVGQCPLVGPMPMHRRLHLLPARIPRPG
 LSEARCHLLFAAALAAAATLGCTGLVAYTGGLTPVWCFPGATFAP

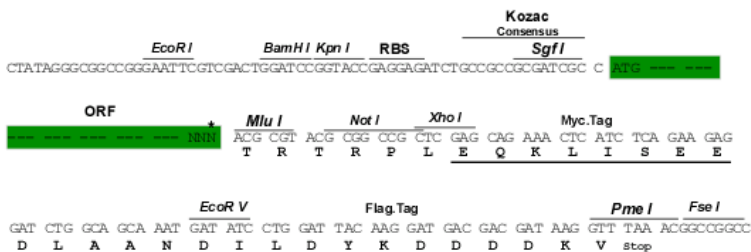
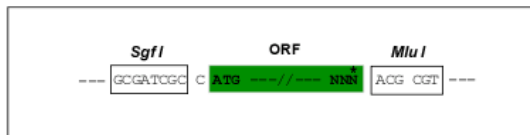
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

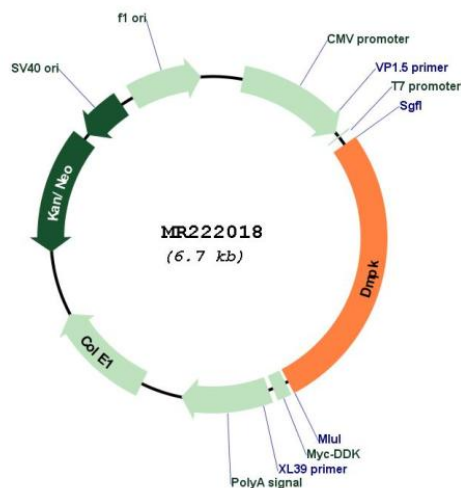
Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001190490

ORF Size: 1815 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:	<ol style="list-style-type: none">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_001190490.2
RefSeq Size:	2683 bp
RefSeq ORF:	1818 bp
Locus ID:	13400
Cytogenetics:	7 9.46 cM
MW:	66.6 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]