

Product datasheet for **RC239226**

Dystrophia myotonica protein kinase (DMPK) (NM_001288764) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dystrophia myotonica protein kinase (DMPK) (NM_001288764) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Dystrophia myotonica protein kinase
Synonyms:	DM; DM1; DM1PK; DMK; MDPK; MT-PK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC239226 representing NM_001288764
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGGTGCCTGTCCAACATGTGAGCCGAGGTGCGGCTGAGGCGGCTCCAGCAGCTGGTGTGGACCCG
 GGCTTCCTGGGGCTGGAGCCCCTGCTCGACCTTCTCCTGGGCGTCCACCAGGAGCTGGGCGCCTCCGAAC
 TGGCCCAGGACAAGTACGTGGCCGACTTCTTGCACTGGGCCCCAAATCCAGGGTTTTCCAAAGTGTGGTT
 CAAGAACCACCTGCATCTGAATCTAGAGCGGAGCCCATCGTGGTGAGGCTTAAGGAGGTCCGACTGCAGA
 GGGACGACTTCGAGATTCTGAAGGTGATCGGACGCGGGCGTTACAGCAGGTAGCGGTAGTGAAGATGAA
 GCAGACGGGCCAGGTGTATGCCATGAAGATCATGAACAAGTGGGACATGCTGAAGAGGGGCGAGGTGTCTG
 TGCTTCCGTGAGGAGAGGACGTGTGGTGAATGGGACCGGCGGTGGATCACGCAGCTGCACCTTCGCCT
 TCCAGGATGAGAACTACCTGTACCTGGTCATGGAGTATTACGTGGGCGGGGACCTGCTGACACTGCTGAG
 CAAGTTTGGGAGCGGATTCCGGCCGAGATGGCGCGCTTCTACCTGGCGGAGATTGTCATGGCCATAGAC
 TCGGTGCACCGGCTTGGCTACGTGCACAGGGACATCAAACCCGACAACATCCTGCTGGACCGCTGTGGCC
 ACATCCGCTGGCCGACTTCGGCTCTTGCTCAAGCTGCGGGCAGATGGAACGGTGCGGTGCTGGTGGC
 TGTGGGACCCACAGACTACCTGTCCCCGAGATCCTGCAGGCTGTGGGCGGTGGGCTGGGACAGGCAGC
 TACGGGCCGAGTGTGACTGGTGGGCGCTGGGTGTATTCGCCTATGAAATGTTCTATGGGACAGCCCT
 TCTACGCGGATTCCACGGCGGAGACCTATGGCAAGATCGTCCACTACAAGGAGCACCTCTCTGCGCGT
 GGTGGACGAAGGGTCCCTGAGGAGGCTCGAGACTTATTACGCGGTTGCTGTGTCCCCGGAGACACGG
 CTGGGCGGGGTGGAGCAGGCGACTTCCGGACACATCCCTTCTTCTTGGCCTCGACTGGGATGGTCTCC
 GGGACAGCGTGCCCCCTTTACACCGGATTTCAAGGTGCCACCGACACATGCAACTTCGACTTGGTGGA
 GGACGGGCTCACTGCCATGGTGAGCGGGGCGGGGAGACACTGTCGGACATTTCGGGAAGGTGCGCCGCTA
 GGGGTCCACCTGCCTTTTGTGGGCTACTCCTACTCCTGCATGGCCCTCAGGGACAGTGAGGTCCCAGGCC
 CCACACCATGGAAGTGGAGGCCGAGCAGCTGCTTGAGCCACACGTGCAAGCGCCAGCCTGGAGCCCTC
 GGTGTCCACAGGATGAAACAGCTGAAGTGGCAGTTCAGCGGCTGTCCCTGCGGCAGAGGCTGAGGCC
 GAGGTGACGCTGCGGGAGCTCCAGGAAGCCCTGGAGGAGGAGGTGCTCACCCGGCAGAGCCTGAGCCGGG
 AGATGGAGGCCATCCGCACGGACAACCAGAACTTCGCCAGTCACTACGCGAGGCAGAGGCTCGGAACCG
 GGACCTAGAGGCACACGTCCGGCAGTTGCAGGAGCGGATGGAGTTGCTGCAGGCAGAGGGAGCCACAGCT
 GTCACGGGGTCCCCAGTCCCCGGGCCACGGATCCACCTTCCATCTAGATGGCCCCCGGCCGTGGCTG
 TGGGCCAGTGCCCGCTGGTGGGGCCAGGCCCATGCACCGCCGCCACCTGCTGCTCCCTGCCAGGGTCCC
 TAGGCCTGGCCTATCGGAGGCGCTTCCCTGCTCCTGTTGCGCGTTGTTCTGTCTCGTGCCGCCGCCCTG
 GGCTGCATTGGTTGGTGGCCACGCGGCCAACTCACCGCAGTCTGGCGCCGCCAGGAGCCGCCCGCG
 CTTCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGTTTAA

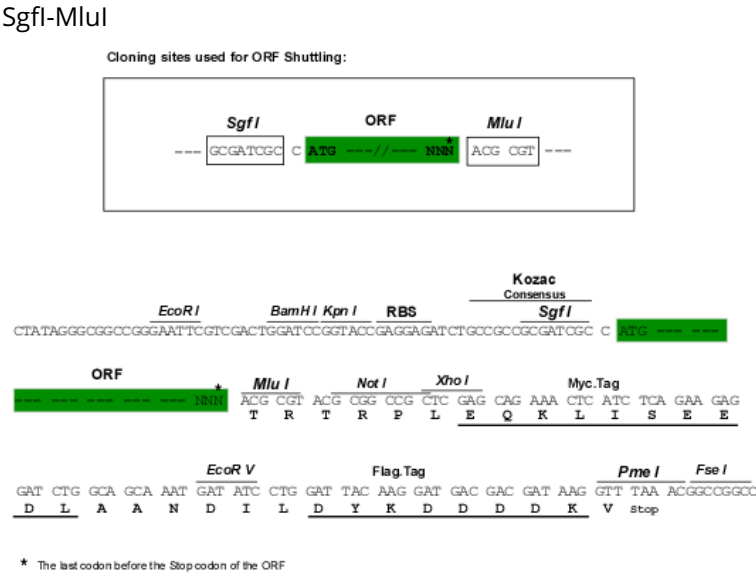
Protein Sequence: >RC239226 representing NM_001288764
Red=Cloning site Green=Tags(s)

MVLVPVQHVSRAAEAAPAAGVGPGLPGAGAPARPSGRPPGAGRLRTGPGQVVRGRLAVGPKSRVFQSVV
 QEPPASESRAEPIVVRLKEVRLQRDDFEILKVIIGRAFSEVAVVKMKQTGQVYAMKIMNKWMLKRGEVS
 CFREERDVLVNGDRRWITQLHFAFDENLYLVMEYVVGDDLTLSSKFGERIPAEMARFYLAIEIVMAID
 SVHRLGYVHRDIKPDNILLDRCGHIRLADFGSCLKLADGTVRSLVAVGTPDYLSPEILQAVGGGPGTGS
 YGPECDDWALGVFAYEMFYGTPTFYADSTAETYGKIVHYKEHLSLPLVDEGVPEEARDFIQRLCCPPETR
 LGRGGAGDFRTHPFFFLDWDGLRDSVPPFTPDFEGATDTCNFDLVEDGLTAMVSGGGETLSDIREGAPL
 GVHLFPVGYSSCMALRDSEVPGPPTMELEAEQLLEPHVQAPSLEPSVSPQDETAEVAVPAAPAAEAEA
 EVTLRELQEALEEEVLTRQSLREMEAIRTDNQNFASQLREAEARNRDLEAHVRQLQERMELLQAEGATA
 VTGVPSPRATDPPSHLDGPPAVAVGQCPLVGPGPMHRRHLLPARVPRPGLSEALSLLLFAVVLRAAAL
 GCIGLVAHAGQLTAVWRRPGAARAP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Cloning Scheme:



ACCN: NM_001288764

ORF Size: 1965 bp

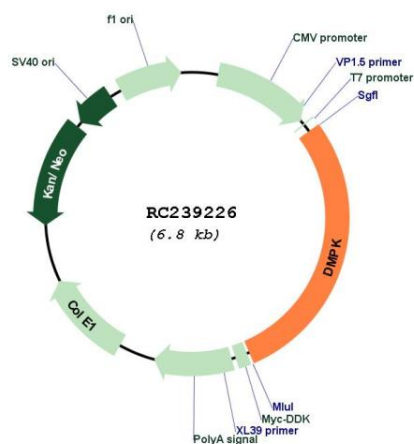
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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 0.22um filter is required.
RefSeq:	<u>NM_001288764.2</u>
RefSeq Size:	2933 bp
RefSeq ORF:	1968 bp
Locus ID:	1760
Cytogenetics:	19q13.32
Protein Families:	Druggable Genome, Protein Kinase
MW:	71.6 kDa
Gene Summary:	The protein encoded by this gene is a serine-threonine kinase that is closely related to other kinases that interact with members of the Rho family of small GTPases. Substrates for this enzyme include myogenin, the beta-subunit of the L-type calcium channels, and phospholemman. The 3' untranslated region of this gene contains 5-38 copies of a CTG trinucleotide repeat. Expansion of this unstable motif to 50-5,000 copies causes myotonic dystrophy type I, which increases in severity with increasing repeat element copy number. Repeat expansion is associated with condensation of local chromatin structure that disrupts the expression of genes in this region. Several alternatively spliced transcript variants of this gene have been described, but the full-length nature of some of these variants has not been determined. [provided by RefSeq, Jul 2016]

Product images:



Circular map for RC239226