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Product datasheet for SC336704

Dystrophia myotonica protein kinase (DMPK) (NM_001288765) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dystrophia myotonica protein kinase (DMPK) (NM_001288765) Human Untagged Clone
Tag:	Tag Free
Symbol:	DMPK
Synonyms:	DM; DM1; DM1PK; DMK; MDPK; MT-PK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

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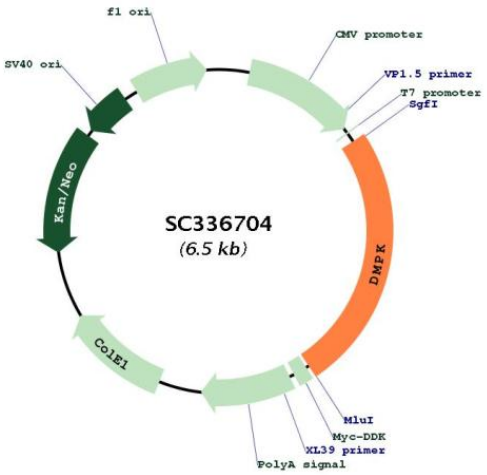
Fully Sequenced ORF:

>SC336704 representing NM_001288765.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGAAGCAGACGGGCCAGGTGTATGCCATGAAGATCATGAACAAGTGGGACATGCTGAAGAGGGGCGAG
GTGTCGTGCTTCCGTGAGGAGAGGGACGTGTTGGTGAATGGGGACCGGCGGTGGATCACGCAGCTGCAC
TTCGCCTTCCAGGATGAGAACTACCTGTACCTGGTCATGGAGTATTACGTGGGCGGGGACCTGCTGACA
CTGCTGAGCAAGTTTGGGGAGCGGATTCCGGCCGAGATGGCGCGCTTCTACCTGGCGGAGATTGTCATG
GCCATAGACTCGGTGCACCGGCTTGGCTACGTGCACAGGGACATCAAACCCGACAACATCCTGCTGGAC
CGCTGTGGCCACATCCGCCTGGCCGACTTCGGCTCTTGCCTCAAGCTGCGGGCAGATGGAACGGTGCGG
TCGCTGGTGGCTGTGGGCACCCCAGACTACCTGTCCCCCGAGATCCTGCAGGCTGTGGGCGGTGGGCCT
GGGACAGGCAGCTACGGGCCCGAGTGTGACTGGTGGGCGCTGGGTGTATTCGCCTATGAAATGTTCTAT
GGGCAGACGCCCTTCTACGCGGATTCCACGGCGGAGACCTATGGCAAGATCGTCCACTACAAGGAGCAC
CTCTCTCTGCCGCTGGTGGACGAAGGGGTCCCTGAGGAGGCTCGAGACTTCATTCAGCGGTTGCTGTGT
CCCCCGGAGACACGGCTGGGCCGGGGTGGAGCAGGCGACTTCCGGACACATCCCTTCTTCTTTGGCCTC
GACTGGGATGGTCTCCGGGACAGCGTGCCCCCCTTTACACCGGATTTCGAAGGTGCCACCGACACATGC
AACTTCGACTTGGTGGAGGACGGGCTCACTGCCATGGTGAGCGGGGGCGGGGAGACACTGTCGGACATT
CGGGAAGGTGCGCCGCTAGGGGTCCACCTGCCTTTTGTGGGCTACTCCTACTCCTGCATGGCCCTCAGG
GACAGTGAGGTCCCAGGCCCCACACCCATGGAACTGGAGGCCGAGCAGCTGCTTGAGCCACACGTGCAA
GCGCCCAGCCTGGAGCCCTCGGTGTCCCCACAGGATGAAACAGCTGAAGTGGCAGTTCCAGCGGCTGTC
CCTGCGGCAGAGGCTGAGGCCGAGGTGACGCTGCGGGAGCTCCAGGAAGCCCTGGAGGAGGAGGTGCTC
ACCCGGCAGAGCCTGAGCCGGGAGATGGAGGCCATCCGCACGGACAACCAGAACTTCGCCAGTCAACTA
CGCGAGGCAGAGGCTCGGAACCGGGACCTAGAGGCACACGTCCGGCAGTTGCAGGAGCGGATGGAGTTG
CTGCAGGCAGAGGGAGCCACAGCTGTCACGGGGGTCCCCAGTCCCCGGGCCACGGATCCACCTTCCCAT
ATGGCCCCCCGGCCGTGGCTGTGGGCCAGTGCCCGCTGGTGGGGCCAGGCCCCATGCACCGCCGCCACC
TGCTGCTCCCTGCCAGGGTCCCTAGGCCTGGCCTATCGGAGGCGCTTTCCCTGCTCCTGTTCGCCGTTG
TTCTGTCTCGTGCCGCCGCCCTGGGCTGCATTGGGTTGGTGGCCCACGCCGGCCAACTCACCGCAGTCT
GGCGCCGCCCAGGAGCCGCCCGCGCTCCCTGAACCCTAG
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: SgfI-MluI

Plasmid Map:



ACCN:	NM_001288765
Insert Size:	1626 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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_001288765.1
RefSeq Size:	2510 bp
RefSeq ORF:	1626 bp
Locus ID:	1760
UniProt ID:	Q09013
Cytogenetics:	19q13.32
Protein Families:	Druggable Genome, Protein Kinase
MW:	59.9 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] Transcript Variant: This variant (6) has multiple differences in the presence and absence of exons at its 5' end, compared to variant 1. These differences produce a distinct 5' UTR, and cause translation initiation at an alternative start codon, compared to variant 1. The encoded protein (isoform 6) has a shorter and distinct N-terminus, compared to isoform 1.