

Product datasheet for SC209981

OriGene Technologies, Inc.

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Dystrophia myotonica protein kinase (DMPK) (NM 001081560) Human 3' UTR Clone

Product data:

Product Type: 3' UTR Clones

Product Name: Dystrophia myotonica protein kinase (DMPK) (NM 001081560) Human 3' UTR Clone

Vector: pMirTarget (PS100062)

Symbol: DMPK

Synonyms: DM; DM1; DM1PK; DMK; MDPK; MT-PK

ACCN: NM_001081560

Insert Size: 801 bp

Insert Sequence: >SC209981 3'UTR clone of NM_001081560

The sequence shown below is from the reference sequence of NM_001081560. The complete

sequence of this clone may contain minor differences, such as SNPs.

Blue=Stop Codon Red=Cloning site

GGCAAGTTGGACGCCCGCAAGATCCGCGAGATTCTCATTAAGGCCAAGAAGGGCGGAAAGATCGCCGTG

TAACAATTGGCAGAGCTCAGAATTCAAGCGATCGCC

ACCCCCGACCCTCGCGAATAAAAGGCCCTCCATCTGCCCAAA

CGAGATTTCGATTCCACCGCCGCCTTCTATGAAAGG

Restriction Sites: Sgfl-Mlul

OTI Disclaimer: Our molecular clone sequence data has been matched to the sequence identifier above as a

point of reference. Note that the complete sequence of this clone is largely the same as the

reference sequence but may contain minor differences, e.g., single nucleotide

polymorphisms (SNPs).





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Components: The cDNA clone is shipped in a 2-D bar-coded Matrix tube as 10 ug dried plasmid DNA. The

package also includes 100 pmols of both the corresponding 5' and 3' vector primers in

separate vials.

RefSeq: <u>NM 001081560.3</u>

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]

Locus ID: 1760

MW: 27.9