

## Product datasheet for RC223643L4V

## OriGene Technologies, Inc.

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## Dystrophia myotonica protein kinase (DMPK) (NM\_001081562) Human Tagged ORF Clone Lentiviral Particle

## **Product data:**

**Product Type:** Lentiviral Particles

**Product Name:** Dystrophia myotonica protein kinase (DMPK) (NM\_001081562) Human Tagged ORF Clone

Lentiviral Particle

Symbol: Dystrophia myotonica protein kinase Synonyms: DM; DM1; DM1PK; DMK; MDPK; MT-PK

Mammalian Cell

Selection:

Puromycin

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

**ACCN:** NM\_001081562

ORF Size: 1875 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(RC223643).

OTI Disclaimer:

Sequence:

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.

**RefSeq:** <u>NM 001081562.1</u>

 RefSeq Size:
 2873 bp

 RefSeq ORF:
 1878 bp

 Locus ID:
 1760

 UniProt ID:
 Q09013

 Cytogenetics:
 19q13.32

**Protein Families:** Druggable Genome, Protein Kinase





MW:

69.4 kDa

**Gene Summary:** 

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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]