

## Product datasheet for RC204245L4V

## OriGene Technologies, Inc.

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## MELK (NM\_014791) Human Tagged ORF Clone Lentiviral Particle

## **Product data:**

**Product Type:** Lentiviral Particles

**Product Name:** MELK (NM\_014791) Human Tagged ORF Clone Lentiviral Particle

Symbol: MELK
Synonyms: HPK38

Mammalian Cell Pi

Selection:

Puromycin

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

Tag: mGFP

**ACCN:** NM\_014791 **ORF Size:** 1953 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(RC204245).

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.

**RefSeg:** NM 014791.2, NP 055606.1

 RefSeq Size:
 2486 bp

 RefSeq ORF:
 1956 bp

 Locus ID:
 9833

 UniProt ID:
 Q14680

 Cytogenetics:
 9p13.2

**Domains:** pkinase, TyrKc, KA1, S\_TKc

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



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**MW:** 74.6 kDa

**Gene Summary:** 

Serine/threonine-protein kinase involved in various processes such as cell cycle regulation, self-renewal of stem cells, apoptosis and splicing regulation. Has a broad substrate specificity; phosphorylates BCL2L14, CDC25B, MAP3K5/ASK1 and ZNF622. Acts as an activator of apoptosis by phosphorylating and activating MAP3K5/ASK1. Acts as a regulator of cell cycle, notably by mediating phosphorylation of CDC25B, promoting localization of CDC25B to the centrosome and the spindle poles during mitosis. Plays a key role in cell proliferation and carcinogenesis. Required for proliferation of embryonic and postnatal multipotent neural progenitors. Phosphorylates and inhibits BCL2L14, possibly leading to affect mammary carcinogenesis by mediating inhibition of the pro-apoptotic function of BCL2L14. Also involved in the inhibition of spliceosome assembly during mitosis by phosphorylating ZNF622, thereby contributing to its redirection to the nucleus. May also play a role in primitive hematopoiesis.[UniProtKB/Swiss-Prot Function]