

Product datasheet for RC222246L3

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com

OriGene Technologies, Inc.

https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

MYLK3 (NM_182493) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: MYLK3 (NM_182493) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: MYLK3

Synonyms: caMLCK; MLCK; MLCK2

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC222246).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF.

ACCN: NM_182493

ORF Size: 2457 bp





MYLK3 (NM_182493) Human Tagged Lenti ORF Clone - RC222246L3

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.

RefSeq: <u>NM 182493.2</u>

 RefSeq Size:
 7998 bp

 RefSeq ORF:
 2460 bp

 Locus ID:
 91807

 UniProt ID:
 Q32MK0

 Cytogenetics:
 16q11.2

Protein Families: Druggable Genome, Protein Kinase

Protein Pathways: Calcium signaling pathway, Focal adhesion, Regulation of actin cytoskeleton, Vascular smooth

muscle contraction

MW: 88.8 kDa

Gene Summary: Phosphorylation of cardiac myosin heavy chains (see MYH7B, MIM 609928) and light chains

(see MYL2, MIM 160781) by a kinase, such as MYLK3, potentiates the force and rate of cross-bridge recruitment in cardiac myocytes (Chan et al., 2008 [PubMed 18202317]).[supplied by

OMIM, Jul 2008]