

### Product datasheet for RC218101L4

#### OriGene Technologies, Inc.

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## MEK3 (MAP2K3) (NM\_002756) Human Tagged Lenti ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

Product Name: MEK3 (MAP2K3) (NM\_002756) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: MEK3

Synonyms: MAPKK3; MEK3; MKK3; PRKMK3; SAPKK-2; SAPKK2

Mammalian Cell Puromycin

Selection:

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

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

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC218101).

Sequence:

Restriction Sites: Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_002756

ORF Size: 954 bp



#### MEK3 (MAP2K3) (NM\_002756) Human Tagged Lenti ORF Clone - RC218101L4

**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 002756.4</u>, <u>NP 002747.2</u>

 RefSeq Size:
 2061 bp

 RefSeq ORF:
 957 bp

 Locus ID:
 5606

 UniProt ID:
 P46734

 Cytogenetics:
 17p11.2

**Domains:** pkinase, TyrKc, S TKc

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

**Protein Pathways:** Amyotrophic lateral sclerosis (ALS), Fc epsilon RI signaling pathway, GnRH signaling pathway,

MAPK signaling pathway, Toll-like receptor signaling pathway

MW: 36.6 kDa

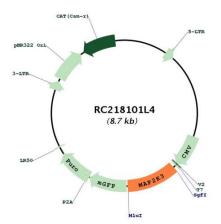
**Gene Summary:** The protein encoded by this gene is a dual specificity protein kinase that belongs to the MAP

kinase kinase family. This kinase is activated by mitogenic and environmental stress, and participates in the MAP kinase-mediated signaling cascade. It phosphorylates and thus activates MAPK14/p38-MAPK. This kinase can be activated by insulin, and is necessary for the expression of glucose transporter. Expression of RAS oncogene is found to result in the accumulation of the active form of this kinase, which thus leads to the constitutive activation of MAPK14, and confers oncogenic transformation of primary cells. The inhibition of this kinase is involved in the pathogenesis of Yersina pseudotuberculosis. Multiple alternatively spliced transcript variants that encode distinct isoforms have been reported for this gene.

[provided by RefSeq, Jul 2008]



# **Product images:**



Circular map for RC218101L4