

Product datasheet for RC204668

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

MAP2K1IP1 (LAMTOR3) (NM_021970) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: MAP2K1IP1 (LAMTOR3) (NM_021970) Human Tagged ORF Clone

Tag: Myc-DDK
Symbol: MAP2K1IP1

Synonyms: MAP2K1IP1; MAPBP; MAPKSP1; MP1; PRO0633; Ragulator3

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>RC204668 ORF sequence

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGCGGATGACCTAAAGCGATTCTTGTATAAAAAGTTACCAAGTGTTGAAGGGCTCCATGCCATTGTTG
TGTCAGATAGAGATGGAGTACCTGTTATTAAAGTGGCAAATGACAATGCTCCAGAGCATGCTTTACGACC
TGGTTTCTTATCCACTTTTGCCCTTGCAACAGACCAAGGAAGCAAACTTGGACTTTCCAAAAATAAAAGT
ATCATCTGTTACTATAACACCTACCAGGTGGTTCAATTTAATCGTTTACCTTTGGTGGTGAGTTTCATAG
CCAGCAGCAGTGCCAATACAGGACTAATTGTCAGCCTAGAAAAGGAACTTGCTCCATTGTTTGAAGAACT

GAGACAAGTTGTGGAAGTTTCT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAG**GTTTAA**

Protein Sequence: >RC204668 protein sequence

Red=Cloning site Green=Tags(s)

MADDLKRFLYKKLPSVEGLHAIVVSDRDGVPVIKVANDNAPEHALRPGFLSTFALATDQGSKLGLSKNKS

IICYYNTYQVVQFNRLPLVVSFIASSSANTGLIVSLEKELAPLFEELRQVVEVS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6069 a09.zip

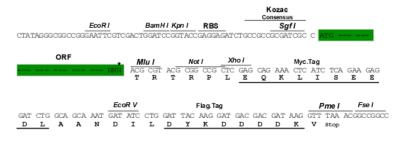
Restriction Sites: Sgfl-Mlul





Cloning Scheme:





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

ACCN: NM_021970

ORF Size: 372 bp

OTI Disclaimer:

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at customport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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. <u>More info</u>

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 021970.4</u>

RefSeq Size:4280 bpRefSeq ORF:375 bp

Locus ID: 8649
UniProt ID: Q9UHA4

Cytogenetics: 4q23

Protein Families: Druggable Genome

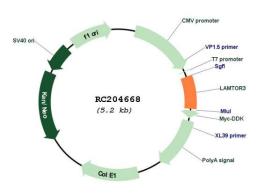
Protein Pathways: MAPK signaling pathway

MW: 13.6 kDa

Gene Summary: This gene encodes a scaffold protein that functions in the extracellular signal-regulated

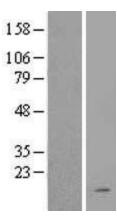
kinase (ERK) cascade. The protein is localized to late endosomes by the mitogen-activated protein-binding protein-interacting protein, and binds specifically to MAP kinase kinase MAP2K1/MEK1, MAP kinase MAPK3/ERK1, and MAP kinase MAPK1/ERK2. Studies of the orthologous gene in mouse indicate that it regulates late endosomal traffic and cell proliferation. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. A pseudogene of this gene is located on the long arm of chromosome 13. [provided by RefSeq, Aug 2011]

Product images:



Circular map for RC204668





Western blot validation of overexpression lysate (Cat# [LY411845]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204668 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).