

Product datasheet for **RG204668**

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: TurboGFP
Symbol: MAP2K1IP1
Synonyms: MAP2K1IP1; MAPBP; MAPKSP1; MP1; PRO0633; Ragulator3
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG204668 representing NM_021970
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGATGACCTAAAGCGATTCTTGTATAAAAAGTTACCAAGTGTGAAGGGCTCCATGCCATTGTTG
TGTCAGATAGAGATGGAGTACCTGTTATTAAGTGGCAAATGACAATGCTCCAGAGCATGCTTTACGACC
TGGTTTCTTATCCACTTTTGCCTTGCAACAGACCAAGGAAGCAAAGTGGACTTCCAAAAATAAAGT
ATCATCTGTTACTATAACACCTACCAGGTGGTTCAATTTAATCGTTTACCTTTGGTGGTGGTTCATAG
CCAGCAGCAGTGCCAATACAGGACTAATTGTCAGCCTAGAAAAGGAAGTCTCCATTGTTGAAGAAGT
GAGACAAGTTGTGAAGTTTCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG204668 representing NM_021970
Red=Cloning site Green=Tags(s)
MADDLKRFLYKLLPSVEGLHAIIVVSDRDGVPVIKVANDNAPEHALRPGFLSTFALATDQGSKLGLSKNKS
IICYNTYQVVQFNRLPLVVSFIASSANTGLIVSLEKELAPLFEELRQVVEVS

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



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Cloning Scheme:


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 custsupport@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. [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: [NM_021970.2](#), [NP_068805.1](#)

RefSeq Size: 1416 bp

RefSeq ORF: 375 bp

Locus ID: 8649

UniProt ID: [Q9UHA4](#)

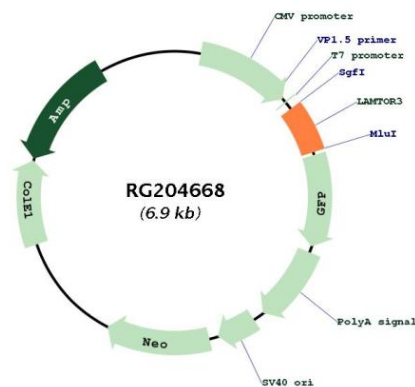
Cytogenetics: 4q23

Protein Families: Druggable Genome

Protein Pathways: MAPK signaling pathway

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 RG204668