

## Product datasheet for SC112835

### MAP2K1IP1 (LAMTOR3) (NM\_021970) Human Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** MAP2K1IP1 (LAMTOR3) (NM\_021970) Human Untagged Clone  
**Tag:** Tag Free  
**Symbol:** MAP2K1IP1  
**Synonyms:** MAP2K1IP1; MAPBP; MAPKSP1; MP1; PRO0633; Ragulator3  
**Mammalian Cell Selection:** None  
**Vector:** [pCMV6-XL5](#)  
**E. coli Selection:** Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene sequence for NM\_021970 edited  
 GAATTCGGCACGAGGGGTGACGGTGGCTTGAGGAGGAACCTGTCTTTAAAGCTGTCCTGA  
 AGTGACAGCGGAGAGAACCAGGCAGCCAGAAACCCAGGCGTGGAGATTGATCCTGCGA  
 GAGAAGGGGGTTTCATCATGGCGGATGACCTAAAGCGATTCTTGTATAAAAAGTTACCAAG  
 TGTGAAGGGCTCCATGCCATTGTTGTGTCAGATAGAGATGGAGTACCTGTTATTAAGT  
 GGCAAATGACAATGCTCCAGAGCATGCTTTGCGACCTGGTTTCTTATCCACTTTTGCCCT  
 TGCAACAGACCAAGGAAGCAAACCTGGACTTTCCAAAAATAAAAGTATCATCTGTTACTA  
 TAACACCTACCAGGTGGTTCAATTTAATCGTTTACCTTTGGTGGTGGAGTTTCATAGCCAG  
 CAGCAGTGCCAATACAGGACTAATTGTCAGCCTAGAAAAGGAACCTGCTCCATTGTTGA  
 AGAACTGAGACAAGTTGTGGAAGTTTCTAATCTGACAGTGGTTTCAGTGTGTACCTTAT  
 CTTTATTATAACAACACAATATCAATCCAGCAATCTTTAGACTACAATAACTTTTATC  
 CATGTGCTCAAGAAAGGGCCCTTTTCCAACCTATACTAAAGAGCTAGCATATAGATGT  
 AATTTATAGATAGATCAGTTGCTATATTTCTGGTGTAGGGTCTTTCTTATTTAGTGAGA  
 TCTAGGGATACCACAGAAATGGTTCAGTCTATCACAGCTCCCATGGAGTTAGTCTGGTCA  
 CCAGATATGGATGAGAGATTCTATTCAGTGGATCAGAATCAAACCTGGTACATTGATCCAC  
 TTGAGCCGTTAAGTGTGCAATGTACAATATGCCAGGCTTGCAGAATAAAGCCAACCT  
 TTTTATTGTGAATAATAAAGGACATATTTTCTTCAGATTATGTTTTATTTCTTTGCA  
 TTGAGTGAGGAACATAAAATGGCTTGGTAAAAGTAATAAAATCAGTACAATCACTAACTT  
 TCCTTTGTACATATTATTTGTCAGTATAGATGAATATTACTAATCAGTTTGATTATCTC  
 AGAGGGTGTGCTCTTTAATGAAAATGAAAATTATAGCTAATGTTTTTCTCAAACCTC  
 GCTTTCTGTAACCAATCAGTGTTTAATGTTTGTGTTCTTCATAAAATTTAAATACAA  
 TTCGTTATTCTGTTTCCAATGTTAGTATGTATGTAACATGATAGTACAGCCATTTTTTT  
 CATATGTGAGTAAAAATAAAATAGTATTTTTAAAAATATAAXXXXXXXXXXXXXXXXXXX  
 XXACTCGAC



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**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_021970 unedited  
 CCGGTT CAGGCATATTTGTNAATACGCATTTCACTATAGGGNCCGGCCGCAATTCGGC  
 ACGAGGGTGACGGTGGCTTGAGGAGGAACCTGTCTTTAAACCTGTCCCTGAAGTGACAGC  
 GGAGAGAAC CAGGCAGCCAGAAACCCAGGCGTGGAGATTGATCCTGCGAGAGAAGGGG  
 GTTCATCATGGCGGATGACCTAAAGCGATTCTTGTATAAAAAGTTACCAAGTGTTGAAGG  
 GCTCCATGCCATTGTTGTGCAGATAGAGATGGAGTACCTGTTATTAAGTGGCAATGA  
 CAATGCTCCAGAGCATGCTTTGCGACCTGGTTTCTTATCCACTTTTGCCCTTGCAACAGA  
 CCAAGGAAGCAAACCTGGACTTTCCAAAAATAAAAGTATCATCTGTTACTATAACACCTA  
 CCAGGTGGTTCAATTTAATCGTTTACCTTTGGTGGTGAGTTTCATAGCCAGCAGCAGTGC  
 CAATACAGGACTAATTGTCAGCCTAGAAAAGGAACTTGCTCCATTGTTTGAAAGACTGAG  
 ACAAGTTGTGGAAGTTTCTTAATCTGACAGTGGTTTCAGTGTGTACCTTATCTTCATTAT  
 AACACACAATATCAATCCAGCAATCTTAGACTACAATAATACTTTTATCCATGTGCTC  
 AAGAAAGGGCCCTTTTCCAACCTATACTAAAGAGCTAGCATATAGATGTAATTTATAG  
 ATAGATCAGTTGCTATATTTCTGGTGTACGGTCTTTCTATTTAGTGAGATCCTAGGAT  
 ACACAGAAATGTTTCAGTCTATCACAGCTCCCATGGAGTTAGTCTGGCCACCAGATATGG  
 ATGAGAGATTCTATTCAGTGCATCAGAATCAACCTGGTCATTGATCCACCTGAGCCGCTA  
 AGTGCTGCCAATTGTACATT

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_021970 unedited  
 TTTAAATACTATTTTATTTTACTCACATATGNAAAAATGGCTGTACTATCATGTTTAC  
 ATACATACTAACATTGGAACAGAAATAACGAATTGTATTTAAATTTTATGAAGAACACAC  
 AAACATTAACACTGATTGGTTACAGAAAGCAGAGTTTGAGGAAAAACATTAGCTATA  
 ATTTTCATTTTCATTAAGAGCAGCACCCCTCTGAGAATAATCAAACCTGATTAGTAATATT  
 CATCTATACTGCAAAATAATATGTACAAAGGAAAGTTAGTGATTGTACTGATTTTATTAC  
 TTTTACCAAGCCATTTTATGTTCCCTCACTCAATGCAAAGAAATAAACATAATCTGAAGA  
 AAAATATGTCCTTATTATTATTACAAATAAAAAGTTGGCTTTATTCTGCAAGCCTGGGCA  
 TATTGTACAATTGGCAGCACTTAACGGCTCAAGTGGATCAATGTACCAGTTTGATTCTGA  
 TCCACTGAATAGAATCTCTCATCCATATCTGGTGACCAGACTAACTCCATGGGAGCTGTG  
 ATAGACTGAACCATTTCTGTGGTATCCCTAGATCTCACTAAATAAGAAAGACCCTACACC  
 AGAAAAATAGCAACTGATCTATCTATAAATTACATCTATATGCTAGCTCTTTAGTATAA  
 GTTGAAAAAGGGGCCCTTTCTTGAGCACATGGATAAAAAGTATTATTGTAGTCTAAAGAT  
 TGCTGGATTGATATTGTGTTGTTATAATGAAGATAAGGTACACACTGAAACCACTGTCAG  
 ATTAGAAACTTCCACAACCTGTCTCAGTTCTTAAACAATGGAGNNCAGTNCTTTTCTAGG  
 CTGACAATTAGTCTGTATTGGCACTGCTGCTGGCATGAAACTCACCAAAAGGTAACG  
 ATTAATGAACCACTGNTAGGTGTATAGTACAGATGATCTTTATTTTGGAAAGTCAGTTT  
 GCTTCTGTCTGTGCAAG

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_021970

**Insert Size:**

1430 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](mailto: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](#)

**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]

Transcript Variant: This variant (1) represents the longest transcript and encodes the longer isoform (1).