

## Product datasheet for MC206651

### Mapkapk5 (BC019184) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Mapkapk5 (BC019184) Mouse Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Mapkapk5  
**Synonyms:** MK5, PRAK  
**Mammalian Cell Selection:** Neomycin  
**Vector:** PCMV6-Kan/Neo (PCMV6KN)  
**E. coli Selection:** Kanamycin (25 ug/mL)

**Fully Sequenced ORF:** >BC019184  
 CCACGCGTCCGCCACGCGTCCGCCGAGCTCCGAGCCCTTTGCTTCTCGGCTGCCAGGGGACGGGACAG  
 CCGCGCAGCCTCCGCCGCTTCCGGCTGTGGAGCCAGCGGAGCATGTCGGAGGACAGCGACATGGAGAA  
 AGCCATCAAGGAGACCTCCATTTTGAAGAATATAGTATCAATTGACTCAGAACTGGGAGCCGAATT  
 AGTGGTCCAGTTAGAGTCTGTGTGAAGAAATCCACTCAAGAACGGTTTGCAGTAAAAATTCTTTGATC  
 GTCCAAAAGCTAGAAATGAGGTGCGCTGCACATGATGTGTGCCACACCCCAACATAGTTCAGATTAT  
 TGAAGTGTGGTAAACAGTGTACAGTTCCTCATGAGTCCAGCCAGGGCTCGACTCTTAATTGTAATG  
 GAGATGATGGAAGGGGAGAGCTATTTACAGAATCAGCCAGCACCAGGCACTTTACAGAGAAGCAAGCCA  
 GCCAAGTAACAAAGCAGATAGCCCTGGCTCTACAGCACTGTCACCTGCTAAACATTGCGCACAGAGACCT  
 CAAGCCTGAAAACTGCTTTTCAAGGATAACTCTCTGGACGCCCTGTGAAATTATGTACTTTGGGTTT  
 GCTAAAGTTGACCAAGGTGATTTGATGACACCCAGTTTACCCTTACTATGTAGCACCTCAGGTACTGG  
 AAGCGCAGAGACGCGACCAGAAGGAGAAGTCTGGCATCATACCTACCTCGCCAACACCCTACACTTACAA  
 CAAGAGCTGTGACTTGTGGTCCCTAGGGGTGATAATTTATGTGATGCTGTGCGGATATCCTCCTTTTAC  
 TCCAAACACCATAGTCGGACTATCCCAAAGGATATGCGGAAAAAGATCATGACAGGAAGTTTCGAGTTCC  
 CAGAAGAAGAGTGGAGCCAGATCTCAGAGATGGCTAAAGATGTTGTGAGGAAGCTTCTGAAGGTCAAACC  
 AGAGGAAAGACTCACAATCGAGGGAGTGTGGACCATCCCTGGCTCAACTCGACAGAGCCCTGGATAAT  
 GTGCTACCCTCTGCCAGCTGATGATGGATAAAGCGGTGGTTGCGGGGATCCAGCAGGCGCACGCCGAGC  
 AGCTGGCAAACATGAGGATCCAGGACCTCAAGGTCAAGCTCAAACCCCTGCACTGTCAACAACCCCAT  
 TCTCAGGAAGAGGAAGCTGCTGGCACCAAGCCAAAGGACGGTATTTATACACGACCATGAGAATGGA  
 ACTGAGGACTCAAATGTTGCCTTGGAAAAGCTTCGAGATGTCATTGCCAGTGTATCCTCCCCAGGCTG  
 GTAAGGAGAGAATGAAGATGAGAAGCTGAATGAGGTAATGCAGGAGGCCTGGAAGTACAACCGGAATG  
 CAAGCTCTGAGGGATGCTCTGCAGAGTTTTAGCTGGAATGGCCGTGGATTACAGATAAAGTTGACCGA  
 TTGAAGCTGGCAGAGGTGGTAAAGCAGGTGATCGAAGAGCAGACCCTTCCCCACGAGCCCCAGTAGTAAC  
 AGCTTAAAAGTGTTTTAAACAATTGAAAAAATTATTCCTTAATGAAAAAGTAATTTTTATGTAATTTAA  
 TAAATCATAATTTCAATTTCCAAA AAAAAAAAAA

**Restriction Sites:** EcoRI-NotI



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<b>ACCN:</b>	BC019184
<b>Insert Size:</b>	1422 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">BC019184</a> , <a href="#">AAH19184</a>
<b>RefSeq Size:</b>	1691 bp
<b>RefSeq ORF:</b>	1422 bp
<b>Locus ID:</b>	17165
<b>Cytogenetics:</b>	5 F
<b>Gene Summary:</b>	<p>Tumor suppressor serine/threonine-protein kinase involved in mTORC1 signaling and post-transcriptional regulation. Phosphorylates FOXO3, ERK3/MAPK6, ERK4/MAPK4, HSP27/HSPB1, p53/TP53 and RHEB. Acts as a tumor suppressor by mediating Ras-induced senescence and phosphorylating p53/TP53. Involved in post-transcriptional regulation of MYC by mediating phosphorylation of FOXO3: phosphorylation of FOXO3 leads to promote nuclear localization of FOXO3, enabling expression of miR-34b and miR-34c, 2 post-transcriptional regulators of MYC that bind to the 3' UTR of MYC transcript and prevent MYC translation. Acts as a negative regulator of mTORC1 signaling by mediating phosphorylation and inhibition of RHEB. Part of the atypical MAPK signaling via its interaction with ERK3/MAPK6 or ERK4/MAPK4: the precise role of the complex formed with ERK3/MAPK6 or ERK4/MAPK4 is still unclear, but the complex follows a complex set of phosphorylation events: upon interaction with atypical MAPK (ERK3/MAPK6 or ERK4/MAPK4), ERK3/MAPK6 (or ERK4/MAPK4) is phosphorylated and then mediates phosphorylation and activation of MAPKAPK5, which in turn phosphorylates ERK3/MAPK6 (or ERK4/MAPK4). Mediates phosphorylation of HSP27/HSPB1 in response to PKA/PRKACA stimulation, inducing F-actin rearrangement. [UniProtKB/Swiss-Prot Function]</p>