

Product datasheet for **MC204528**

Mapkap3 (NM_178907) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mapkap3 (NM_178907) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Mapkap3
Synonyms:	3PK; AI874665; MAPKAP-K3; MAPKAP3; MapkKap3; MK-3; MK3
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >BC031467
 GCCCTGGCCTGCCCAACCCGGACTAGCCTGGCCCTTTAAGGTTGACCTAGCGGGGCCCAAGTCTGGATG
 ACGCGACGAGAAGCGGGGTGGGGGTACGTGGGACGCGGGCGGCGAGACCCTGGGTCCAGGGTCCGG
 TCCTCAGCGGACTCCAGGGATCACTATCTTGGCCACTCTGGCCTGCACCATGATTTTCGTGTAGTGCT
 TTGCCACCAAGTGCCTTCGCCTGGTCCGCCTTCTTGGGTCTCTGTATGGCTGGTCTCAAGACCTTG
 TTGCTATACAGCGCCGGACTCCTTCTAATTTGACACGTGCCTGGGCTGAGGGATCACCTCCCCTGCTG
 TACGTGCCTCTGGACGCGCCAGGCTGGGCTACCTCCGAGCGCCCGTGGGGGCCATGGATGGCGAGACA
 GCAGGGGAGAAGGGAGTCTTGTCCCCGCCAGGTGCGCTCGGCGGGTCCGCCTTGGGCGGTGCTCCGG
 CCCCAGGTGTGCGACGGGAACCCAGAAGTACGCGGTGACTGATGACTACCAGTTGTCCAAGCAAGTGT
 GGGTCTGGGTGTGAACGGCAAGTACTGGAGTGTACCATCGGCGCTCTGGCCAGAAGTGTGCCCTGAAG
 CTCCTGTATGACAGCCCCAAGGCCCGGCAAGGAGTGGACCACCACTGGCAGGCGTCAGGCGGCCCCACA
 TCGTGCGCATCTGGACGTGTATGAGAATATGCACCACGGCAAGCGCTGTCTCCTCATCGTCATGGAATG
 CATGGAGGGTGGTGTGCTGTTGAGCAGGATTGAGGAGCGTGGTACCAGGCTTTCCTGAGAGAGAGGCT
 GCAGAGATAATGCGGGACATTGGCACTGCCATCCAGTTCTTGCACAGCCGGAACATTGCCACCGAGATG
 TCAAGCCTGAAAACCTACTCTATACATCCAAGGAGAAGGATGCTGTACTTAAACTCACCGATTTTGGCTT
 TGCCAAGGAAACCACCCAAAATGCCCTCCAGACACCCTGTACACTCCCTATTATGTGGCTCCTGAGGTC
 CTGGGTCCAGAGAAGTATGACAAGTCTGTGATATGTGGTCCCTGGGCGTCATCATGTACATCCTTTTGT
 GTGGATCCCACCTTCTACTCCAACACCGGCCAGGCCATCTCTCCAGGAATGAAAAGAAGGATTCGCTT
 GGGCCAGTATAGCTTCCCTAACCTGAATGGTTAGATGTCTCTGAGGATGCCAAGCAGCTAATCCGCCTG
 CTCCTGAAGACAGATCCCACAGAGAGGTAACGATCATGCAGTTTATGAACCATCCTTGGATCAATCAAT
 CCATGGTGGTCCCACAGACCCCACTCTACACAGCCGAGTGTCCAGGAAGACAAAGATCACTGGGATGA
 CGTCAAGGAAGAGATGACCAGTGCCTGGCCACTATGCGGGTACTATGACCAGGTGAAGTCAAGGAC
 CTGAAGACCTCTAACAACCGGCTCCTCAACAAGAGGAGGAAAAAGCAGGCAGGACGCTCTCAGCCTCAC
 AAGGATGCAACAACCAAGTAACTCATGGTGCCTTGGAGAAGCCAGGCTGACAGACTGTAATGTCTGAGGC
 TCTGGCCAGGAGGGCTGGAGTCTTATAACAAAAGGATAATTTTGTGTCTTATGTGTACATTGA
 ACTTGGGGATAAAGAGCTTGGCCCAAGAATCCCAGCCTAAGTCTCAGGCTCTAGCAAGCTGCAGGTCCTC
 AGGGATGGGAGCCCTCTGCGACAGCTGGAGCAACTTTCACACCAGCTTGACTGAGGCCACAGCTGTGT
 CTGCCTCAGGACGCAGCCTTACTTCTAGGCCACTGGGTGTGTGGCGGATATACCCGTTTTTCTATAAAG
 GATGTGTCTGTGTGGGCAGATGGTCTGGCCTTGAGGAAGGATTGGGCCATTGGTGTCTATGGTG
 ACCAGAGGCCATGTTGCTGTCTGAGAATACTGAACACAGGAGGAAGGAGGACAATCAAGGGTCTACCTT
 CTTGGGAGGTCTGTCTCTCACACTGGATGTCCCTCCCAGGCTCTCTCCTCTGGTCTGTAGAGGCT
 GCAGAGTCTGATTGCTTCTTCTGGGTGGTCCAGCCCTGCCTTACTGTAGCAAGAGCCCATGTAACA
 CTCAGAGAGCCACTAGAGTCCCTGGGCCAAGCATCCTCTCCATTACCCCTGATCCAAAAGGTAACTTCT
 CATCTCAACTGAAGGTGTGGATATGTATGTTGGGGTGGGTATCCTTAACCTTTTTCCAGTTTGGAAACC
 TCACTGTGACAAAAGCCCCACCTTCTCTGCTCACCAGATCTCAGGTAGGAAAGCCAGTCTCTGCTGAC
 AGCACGGAATCTCAGGTAGGAAAGTCCGTCTCTGCTGACAGCACGGGCAACCTTGGGACTACTTTTGTG
 AAAGGTCGCACCTGGCTCCCTGTTGTTATTTAGGACCTTTCCGGTACTTTGGATCAGACCTGGCTGAT
 GAAGGGCTGCTGAGCCGTGCTTACAAGGTCTGGTCTGGCTTTAGCAGAATTGGAGCAGAGAGGGTTTTT
 CTTGGCTGATCCCAGACCTAGCCAGCTCTGCCCTGTCTGCCAGGGCAGCATCCAGGTGCTGATGGTCTC
 GATTGGTGACCTGACAAGTGCCTGGCACCCAGCCTACTTCTAGATCCTAGATCCTGGCCCTTCTACTG
 GCTGGGAAACCTTAGATCTTATCAATTACAATGCTGCTGGGTTTTATTTCTGATATCAATAAACACATT
 TTTAACATTTTTCCATGGAAA

Restriction Sites: RsrII-NotI
ACCN: NM_178907
Insert Size: 1155 bp

OTI Disclaimer:	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).
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:	<ol style="list-style-type: none">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:	BC031467 , AAH31467
RefSeq Size:	2856 bp
RefSeq ORF:	1155 bp
Locus ID:	102626
UniProt ID:	Q3UMW7
Cytogenetics:	9 F1

Gene Summary:

Stress-activated serine/threonine-protein kinase involved in cytokines production, endocytosis, cell migration, chromatin remodeling and transcriptional regulation. Following stress, it is phosphorylated and activated by MAP kinase p38-alpha/MAPK14, leading to phosphorylation of substrates. Phosphorylates serine in the peptide sequence, Hyd-X-R-X(2)-S, where Hyd is a large hydrophobic residue. MAPKAPK2 and MAPKAPK3, share the same function and substrate specificity, but MAPKAPK3 kinase activity and level in protein expression are lower compared to MAPKAPK2. Phosphorylates HSP27/HSPB1, KRT18, KRT20, RCSD1, RPS6KA3, TAB3 and TTP/ZFP36. Mediates phosphorylation of HSP27/HSPB1 in response to stress, leading to dissociate HSP27/HSPB1 from large small heat-shock protein (sHsps) oligomers and impair their chaperone activities and ability to protect against oxidative stress effectively. Involved in inflammatory response by regulating tumor necrosis factor (TNF) and IL6 production post-transcriptionally: acts by phosphorylating AU-rich elements (AREs)-binding proteins, such as TTP/ZFP36, leading to regulate the stability and translation of TNF and IL6 mRNAs. Phosphorylation of TTP/ZFP36, a major post-transcriptional regulator of TNF, promotes its binding to 14-3-3 proteins and reduces its ARE mRNA affinity leading to inhibition of dependent degradation of ARE-containing transcript. Involved in toll-like receptor signaling pathway (TLR) in dendritic cells: required for acute TLR-induced macropinocytosis by phosphorylating and activating RPS6KA3. Also acts as a modulator of Polycomb-mediated repression.[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.