

Product datasheet for **MC224370**

Map3k5 (NM_008580) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Map3k5 (NM_008580) Mouse Untagged Clone
Tag: Tag Free
Symbol: Map3k5
Synonyms: 7420452D20Rik; ASK; ASK1; MAPKKK5; Mekk5
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC224370 representing NM_008580
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGCACCGAAGCCGGCGAGGGCATCACTTTCTCCGTGCCGCCCTTTGCGTCCGTGGGCTTTTGCACCA
TCCCGGAGGGCGGCAGCTGCCGGAGGGGAGGAGCGCGGACGGCGCGGAGGGAGAGCCGAGCCTGCA
GCCCTTGCTTGTCCGCCGCCGCCACCGCCGAGTTTCTGGAACGTGGAGAGCGCGCGGCTCCC
GGCACCAGCTGCCCTACCACCGCCCCGGGAGCAGCGCCACCCGAGGCCGGGCAACTCTGGCAGCGGG
GCGGCCGGCGTACCACCGTGGCTTATGTGATCAATGAGGCGAGCCAGGGGAGCTGGTGGTGGCGGAGAG
CGAGGCCCTGCAGAGCCTGCCGGAGGCGTGCGAGGCGGTGGGCGCCACCCTGGAGACCCTGCATTTCCGG
AAGCTGGACTTCGGGAAACCGCCGTGCTGGACCGTTTTTACAACGCAGATATTGCTGTGGTGGAGATGA
GCGACGCCTTCGGCAGCCTTCCCTGTTTTACCATCTGGAGTGCGAGAAAGCTCAGTATGGCCAAACA
CATCATCTCTACTGCGATACTAATCCGATCACTCCAGTCCCTGAAGGAAATATTTGCCAGAAGAAT
ACTGTGTGCACCGGAACTACACCTTACATCCCTACATGGTGACACCACACAACAAGCTACTGCTGTG
ACAGCAGCTTCATGAAGGGCCTGACTGAGCTCATGCAGCCTAATTCGAGCTCCTGCTGGGCCCCATCTG
CTTACCCCTCGTGACCGTTTCGTTTCAGCTTTGAAGGTGGCGCAAGCGAGTTCCAGCCAGTACTCCGG
GAATCCATACTCAGCGATATCAGGAAAGCACGGAACCTGTACACTGGTAAAGAATTGGCAGCTGAATTGG
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CTACAGAGACATCCAGGACTATGACTCCATAGTGAAGCTGGTAGAGACGTTAGAAAACTTCCAACCTTC
GACTTGGCCTCGCACCACCAGTGAAGTTTCATTACGATTTGCACTGAACAGGAGAAATCTCCCTGGAG
ACAGAGCAAAAGCTTTGACATCATGATCCCCATGGTACAAAGTGAAGAGCAAGTTGCTTCGGATATGTA
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TAGCCTTCTGGGTAAAAAGGGAACTTGGAAAACTCCAGAGCTACTGGGAAGTCGGATTTTTTCTGGGA
GCCAGTGTCTGGCAACGACCCTCAGGGTCATTACGGCATCCGAGAAGCTGTTCCAGACTGAAGACAC



CAGCGTGGTACCTCAAGTCTATCGTGGAGACCATTCTGATATATAAACACTTTGTGAAACTGACCACAGA
 GCAGCCCTCGGCTAAGCAGGAACTCGTGGACTTCTGGATGGATTTCTGGTTCGAGGCCACAAAAACAGAT
 GTTACTGTTGTCAGGTTCCAGTATTAATATTAGAGCCAACAAAATCTATCAGCCTTCTTACCTGTCTA
 TCAATAATGAAGTTGAGGAGAAGACAATATCTATTTGGCATGTTCTCCCTGATGACAAGAAAGGTATACA
 CGAGTGGAACTTCGGTGCCTCCTCTGTGAGGGGAGTGAGCATCTAAGTTTGAAGAACGATGCTGTTTC
 CTTTATGTGCTTCACAATTCTGATGACTTCCAAATCTACTTCTGCACAGAACTTCACTGTAAAAGGTTTT
 TTGAAATGGTGAATACCATCACGGAAGAGAAGGGGAGAGCGCGGAGGACGGAGACTGTGAGGGTGACTC
 CCTGGAGTATGACTACGAATACGATGAAAATGGAGACAGAGTTGTGTTAGGGAAGGGCACTTATGGGATC
 GTCTATGCAGGACGAGACCTGAGCAACAGGTCAGAATTGCTATTAAGGAAATCCAGAGAGAGACAGCA
 GATACTCTCAGCCCTGCATGAAGAAATCGCCCTGCACAAGCATCTGAAACACAAAAACATTGTCCAGTA
 TCTGGGCTCCTTCAGTGAGAACGGCTTCATCAAAATCTTCATGGAGCAAGTCCCAGGAGGAAGCCTCTCT
 GCTCTCCTTCTGTTCAAAATGGGGCCATTAAAGGACAACGAACAGACGATTGGCTTCTATACGAAGCAGA
 TACTGGAAGGATTAATAACCTTACGACAATCAGATAGTCCACCGGGATATAAAGGGTGACAATGTATT
 GATTAATACCTACAGTGGTGTGCTCAAGATCTCTGACTTCGGGACATCCAAGAGGCTTGTGGCATAAAC
 CCATGTACCGAAACCTTTACAGGTACCCTTCAGTATATGGCGCCAGAAATATCGATAAAGGACCACGAG
 GCTATGGAAGGGCCGCCGACATTTGGTCACTGGGCTGCACAATCATCGAAATGGCTACTGAAAAACCACC
 ATTTTATGAACTAGGAGAGCCACAGGCAGCCATGTTCAAGGTGGGGATGTTTAAAGGTCCACCCGGAGATC
 CCAGAGTCCATGTGCGCGGAGGCAAGGCGTTCATACTGAAGTGTGTTTGAACCAGACCCTGACAAGAGAG
 CCTGTGCTAATGACTTGCTTATTGATGAGTTCCTAAAAGTGTCCAGCAAAAAAGAAAAAGACACAACCCAA
 ACTTTCAGCTCTCTCGACTGGATCGAATGAGTATCTTAGAAGCATCTCCCTGCCGGTCCCTGTCTGGTA
 GAAGACACCAGCAGCAGTAGCGAGTATGGCTCTGTTTCTCCTGATACAGAGCTGAAGGCGGACCCCTTCT
 CCTTCAAAGCCAGAGCTAAGTCTGTGGAGAAAAGGACGGGAAAGGGATACGGACATTGTTCTGGGCAT
 TCCAGATGAAAAATTTGAAGATCACAGTGCGCCCCCATCTCCTGAAGAGAAAGACTCGGGCTTTTTATG
 CTGAGAAAAGGATAGTGAGAGCGAGCTACCCCTTACAGAATCCTGACCGAAGACCAGGACAAGGTTGTAA
 GGAACCTAATGGAATCTCTGGCCAGGGTGTGAGAGCCTAAACTAAAGTGGGAACACATCACAACCCCT
 CATCTCGAGCCTCAGAGAGTTTGTGAGGTCCACTGACCGAAAAATCATAGCCACTACACTGTCCAAGCTC
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 CGGTCAATAAAGTTCTTCGGAATCATAACATCAAGCCACACTGGATGTTTGCCTGGACAGCATCATCCG
 AAAGGCTGTGCAGACTGCAATTACCATTCTGGTCCAGAGTTGAGGCCACATTTAGCCTTGCATCAGAG
 AGCGACACAGCTGATCCGGAAGACCTGGATGTGGAAGATGAACACGAGGAATTGTCTTCAAATCAGACAG
 TCCGACGGCTCAGGCCATCACTGAGGACGCTGTGGCTACCTCGGGGGTGAACGCTAAGTCCACTGT
 GTCCATGACTCCAGAATGCACACCGGTGCTGAACGTGCAGCTTGAAGGATGAAGATTGAAACTAAT
 AGGTTACTTGAAGAGCTGGTTCGGAAAGAGAGAGATTACAGGCACTCCTCCATCAAGCCATTGAGGAAA
 AAGACCAAGAAATTAGGCACCTGAAGCTCAAGTCCCAGCCATAGATATCCCTGGGTTTCTGTGTGCCA
 CCTGAACTCTCCTGGCAGCACCAGGAAGATTCTGAACTTCTGGCTGGCTGAGAGAAAAAGGAGCTGAT
 GAAGACACTATAAGTTCGGTTTCTGGCTGAGGATTACACGCTAGTGGATGTTCTTTACTACGTCACACGTG
 ATGATCTGAAGTGCCTCAGACTAAGGGGCGGGATGCTGTGCACGCTGTGGAAGGCCATCATTGACTTTCG
 GAACAAATGCTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:

SgfI-MluI

ACCN:

NM_008580

Insert Size:

4143 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:	NM_008580.4 , NP_032606.4
RefSeq Size:	5393 bp
RefSeq ORF:	4143 bp
Locus ID:	26408
UniProt ID:	O35099
Cytogenetics:	10 A3
Gene Summary:	<p>Serine/threonine kinase which acts as an essential component of the MAP kinase signal transduction pathway. Plays an important role in the cascades of cellular responses evoked by changes in the environment. Mediates signaling for determination of cell fate such as differentiation and survival. Plays a crucial role in the apoptosis signal transduction pathway through mitochondria-dependent caspase activation. MAP3K5/ASK1 is required for the innate immune response, which is essential for host defense against a wide range of pathogens. Mediates signal transduction of various stressors like oxidative stress as well as by receptor-mediated inflammatory signals, such as the tumor necrosis factor (TNF) or lipopolysaccharide (LPS). Once activated, acts as an upstream activator of the MKK/JNK signal transduction cascade and the p38 MAPK signal transduction cascade through the phosphorylation and activation of several MAP kinase kinases like MAP2K4/SEK1, MAP2K3/MKK3, MAP2K6/MKK6 and MAP2K7/MKK7. These MAP2Ks in turn activate p38 MAPKs and c-jun N-terminal kinases (JNKs). Both p38 MAPK and JNKs control the transcription factors activator protein-1 (AP-1). [UniProtKB/Swiss-Prot Function]</p>