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Product datasheet for MC218284

Map3k7 (NM_009316) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Map3k7 (NM_009316) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Map3k7
Synonyms:	B430101B05; C87327; Tak1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin

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Fully Sequenced ORF:

>MC218284 representing NM_009316
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCGACAGCCTCCGCCGCCTCGTCCTCCTCCTCGTCTTCTGCCAGTGAGATGATCGAAGCGCCGTCGC
AGGTCCTGAACTTCGAAGAGATCGACTACAAGGAGATCGAGGTGGAAGAGGTTGTCGGAAGAGGAGCTTT
TGGAGTAGTTTGCAAAGCTAAGTGGAGAGCAAAAGATGTCGCTATTAAACAGATAGAAAGTGAGTCTGAG
AGGAAGGCTTTCATTGTGGAGCTCCGGCAGTTGTCACGTGTGAACCATCCTAACATTGTCAAGTTGTATG
GAGCCTGCCTGAATCCAGTATGTCTTGTGATGGAATATGCAGAGGGGGGCTCATTGTATAATGTGCTGCA
TGGTGCTGAACCATTGCCTTACTACACTGCTGCTCATGCCATGAGCTGGTGTTTACAGTGTTCCCAAGGA
GTGGCTTACCTGCACAGCATGCAGCCCAAAGCGCTGATTCACAGGGACCTCAAGCCTCCAAACTTGCTGC
TGGTTGCAGGAGGGACAGTTCTAAAAATCTGCGATTTTGGTACAGCTTGTGACATCCAAACACACATGAC
CAATAATAAAGGGAGTGCTGCTTGGATGGCGCCTGAAGTATTTGAAGGTAGCAATTACAGTGAAAAGTGT
GATGTCTTCAGCTGGGGTATTATCCTCTGGGAAGTGATAACACGCCGGAAACCCTTCGATGAGATCGGTG
GCCCAGCTTTCAGAATCATGTGGGCTGTTCATAATGGCACTCGACCACCACTGATCAAAAATTTACCTAA
GCCCATTGAGAGCTTGATGACACGCTGTTGGTCTAAGGACCCATCTCAGCGCCCTTCAATGGAGGAAATT
GTGAAAATAATGACTCACTTGATGCGGTACTTCCCAGGAGCGGATGAGCCGTTACAGTATCCTTGTCAGT
ACTCTGATGAAGGGCAGAGCAACTCAGCCACCAGCACAGGCTCATTCATGGACATTGCTTCTACAAATAC
CAGTAATAAAAGTGACACAAATATGGAACAGGTTCCTGCCACAAACGACACTATTAAACGCTTGGAGTCA
AAACTTTTGAAAAACCAGGCAAAGCAACAGAGTGAATCTGGACGCCTGAGCTTGGGAGCCTCTCGTGGGA
GCAGTGTGGAGAGCTTGCCCCCCACTTCCGAGGGCAAGAGGATGAGTGCTGACATGTCTGAAATAGAAGC
CAGGATCGTGGCGACTGCAGCCTATTCCAAGCCTAAACGGGGCCACCGTAAAACCGCTTCATTTGGCAAC
ATTCTGGATGTCCCTGAGATCGTCATATCAGGTAACGGGCAACCAAGGCGTAGATCCATCCAAGACTTGA
CTGTTACTGGGACAGAACCTGGTCAGGTGAGCAGCCGGTCATCCAGCCCTAGTGTCAGAATGATCACTAC
CTCAGGACCAACCTCAGAGAAGCCAGCTCGCAGTCACCCGTGGACCCCTGATGATTCCACAGATACCAAT
GGCTCAGATAACTCCATCCCAATGGCGTATCTTACACTGGATCACCAGCTACAGCCTCTAGCGCCGTGCC
CAAACTCCAAAGAATCCATGGCAGTGTTCGAACAACATTGTAAAATGGCACAGGAGTATATGAAAGTTCA
AACCGAAATCGCATTGTTACTACAGAGAAAGCAAGAACTAGTTGCAGAATTGGACCAGGATGAAAAGGAC
CAGCAAAATACATCTCGTCTGGTACAGGAACATAAAAAGCTTTTAGATGAAAACAAAAGCCTTTCTACTT
ATTACCAGCAATGCAAAAAACAACTAGAGGTCATCAGAAGCCAACAGCAGAAACGACAAGGCACTTCATG
A

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_009316

Insert Size: 1821 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:	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_009316.1, NP_033342.1
RefSeq Size:	5763 bp
RefSeq ORF:	1821 bp
Locus ID:	26409
Cytogenetics:	4 A5
Gene Summary:	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 signal transduction of TRAF6, various cytokines including interleukin-1 (IL-1), transforming growth factor-beta (TGFB), TGFB-related factors like BMP2 and BMP4, toll-like receptors (TLR), tumor necrosis factor receptor CD40 and B-cell receptor (BCR) (PubMed:10748100, PubMed:16157589, PubMed:21183079, PubMed:29291351). Ceramides are also able to activate MAP3K7/TAK1. 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 MAP2K1/MEK1, MAP2K3/MKK3, MAP2K6/MKK6 and MAP2K7/MKK7. These MAP2Ks in turn activate p38 MAPKs, c-jun N-terminal kinases (JNKs) and I-kappa-B kinase complex (IKK). Both p38 MAPK and JNK pathways control the transcription factors activator protein-1 (AP-1), while nuclear factor-kappa B is activated by IKK (PubMed:16157589, PubMed:8533096, PubMed:29291351). MAP3K7 activates also IKBKB and MAPK8/JNK1 in response to TRAF6 signaling and mediates BMP2-induced apoptosis (PubMed:10748100). In osmotic stress signaling, plays a major role in the activation of MAPK8/JNK1, but not that of NF-kappa-B. Promotes TRIM5 capsid-specific restriction activity (By similarity). [UniProtKB/Swiss-Prot Function] Transcript Variant: This variant (B) represents the longer transcript and encodes the longer isoform (B). 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.