

Product datasheet for **MG224251**

Map3k8 (NM_007746) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Map3k8 (NM_007746) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Map3k8
Synonyms:	c-COT; Cot; Cot/Tpl2; Est; Estf; Tpl-2; Tpl2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG224251 representing NM_007746
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGAGTACATGAGCACTGGAAGTGACGAGAAAGAAGAAATTGATTTATTAATTAAGCATTAAACGTGT
 CAGAAGTCATAGACATAATGGAGAACCTTTATGCAAGTGAAGAGCCAGGAGTGTATGAGCCAGTCTGAT
 GACCATGTATCCAGACAGCAATCAAATGAGGAACGTTTCGGAGTCACTGCTTCGGAGTGGCCAGGAGTT
 CCCTGGCTGTCATCTGTGAGATATGGGACCGTGGAGGATCTGCTTGCATTTGCAAACCATGTCTCCAATA
 TGACAAAGCATTTTTATGGACGTCGACCACAAGAATGTGGAATTTATTAATATGGTAATCAGTCCCCA
 GAATGGCCGCTACCAAATCGATTCGGATGTTTCCTTGTCTTGGAAAGCTGACATACAGGAACATCGGC
 TCTGTTTTCGTTCCTCGGGGGCCTTTGAAAAGTATACTTAGCCCAAGACATGAAGACAAAGAAAAGAA
 TGGCGTGCAAACGATCCCTATAGATCAGTTTAAAGCCATCGGATGTGAAATCCAGGCCTGTTCCGGCA
 TGAGAACATTGCTGAGTTATATGGTGCCGCTCTATGGGGCGATACTGTCCATCTCTTTATGGAAGCCGGC
 GAGGGAGGGTCTGTTCTGGAGAACTGGAGAGTTGTGGGCCATGAGAGAATTTGAAATTTTGGGTGA
 CGAAGCACATTCTCAAGGACTTGATTTTCTGCACTCCAAGAAAGTGATCCACCATGATATTAACCTAG
 CAACATTGTATTCATGTCTACAAAAGCTGTTTTGGTAGATTTTGGCCTGAGTGTTAAGATGACTGAAGAT
 GTCTATCTTCCCAAGGACCTCCGGGGAACAGAGATATACATGAGCCAGAGGTGATCCTATGTGGGGCC
 ATCCACAAAAGCCGACATCTACAGCCTTGAGCCACACTCATCCACATGCAGACAGGCACCCACCCCTG
 GGTGAAGCGCTACCCTCGATCAGCCTATCCCTCTACCTATACATTATCCACAAGCAGGCACCTCCCCTG
 GAAGACATCGCTGGTACTGCAGTCCAGGCATGAGGGAGCTGATAGAAGCTGCCCTGGAGAGGAACCCCA
 ACCACCGCCCAAAGCAGCAGACCTACTGAAACATGAAGCCCTGAATCCCCAAGAGAGGACCAAGCCAGC
 ATGTCAGAGTCTGGACTCTGCCCTCTTTGAACGGAAGAGGCTGCTGAGCAGGAAGGAACTACAACCTTCT
 GAGAACATTGCTGATTCATCATGCACAGGCAGCACCGAAGAGTCTGAAGTCTCAGGAGACAGCCTTCCC
 TCTACATTGACCTCGGAGCTCTGGCTGGCTACTTCAATATTGTTTCGTGGGCCACCAACCCTGGAATACGG
 C

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG224251 representing NM_007746
 Red=Cloning site Green=Tags(s)

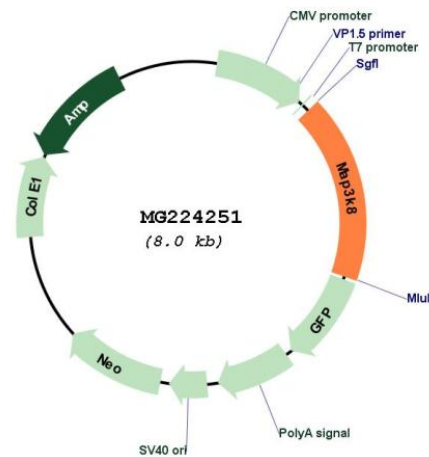
MEYMSTGSDEKEEIDLLIKHLNVSEVIDIMENLYASEEPGVYEPSLMTMYPDSNQNEERSESLLRSGQEV
 PWLSSVRYGTVEDLLAFANHVSNMTKHFYGRRPQECGILLNMVISPQNGRYQIDSDVLLVPWKLTYRNIG
 SGFVPRGAFGKVYLAQDMKTKKRMACKLIPIDQFKPSDVEIQACFRHENIAELYGAVLWGDVHLMFMEAG
 EGGSVLEKLESCGPMREFEIIWVTKHILKGLDFLHKKVIHHDIKPSNIVFMSTKAVLVDFGLSVKMTED
 VYLPKDLRGTEIYMSPEVILCRGHSTKADIYSLGATLIHMQTGTPPWVKRYPRSAYPYLYIIHKQAPPL
 EDIAGDCSPGMRELIEAALERNPNHRPKAADLLKHEALNPPREDQPRCQSLDSALFERKRLLSRKELQLP
 ENIADSSCTGSTEESEVLRQRSLYIDL GALAGYFNIVRGPPTLEYG

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Plasmid Map:


ACCN: NM_007746

ORF Size: 1401 bp

OTI Disclaimer: 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](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_007746.2](#), [NP_031772.1](#)

RefSeq Size: 2507 bp

RefSeq ORF: 1404 bp

Locus ID: 26410

UniProt ID: [Q07174](#)

Cytogenetics: 18 2.73 cM

Gene Summary: Required for lipopolysaccharide (LPS)-induced, TLR4-mediated activation of the MAPK/ERK pathway in macrophages, thus being critical for production of the proinflammatory cytokine TNF-alpha (TNF) during immune responses. Involved in the regulation of T-helper cell differentiation and IFNG expression in T-cells. Involved in mediating host resistance to bacterial infection through negative regulation of type I interferon (IFN) production. Transduces CD40 and TNFRSF1A signals that activate ERK in B-cells and macrophages, and thus may play a role in the regulation of immunoglobulin production. May also play a role in the transduction of TNF signals that activate JNK and NF-kappa-B in some cell types. In adipocytes, activates MAPK/ERK pathway in an IKBKB-dependent manner in response to IL1B and TNF, but not insulin, leading to induction of lipolysis. Plays a role in the cell cycle. [UniProtKB/Swiss-Prot Function]