

Product datasheet for **MG210269**

Mapk6 (NM_027418) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mapk6 (NM_027418) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Mapk6
Synonyms:	2610021I23Rik; D130053K17Rik; Erk3; Mapk4; Mapk63; Prkm4; Prkm6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MG210269 representing NM_027418
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCAGAGAAATTCGAAAGTCTCATGAACATTATGGCTTTGATCTGGGCTCTAGGTACATGGACTTAA
 AACCATTTGGGCTGCGGAGGCAATGGCTTGGTCTTTTCTGCTGTAGACAATGACTGTGACAAAAGAGTAGC
 CATCAAGAAAATTGTCCTCACCGATCCCCAGAGTGTCAAACATGCTCCCCGTGAAATCAAAATTATTCTGA
 AGACTTGACCACGATAACATTGTGAAAGTGTGAAATTTCTGGTCCCAGTGGAAGCCAGTTAACAGACG
 ATGTGGGCTCTCTCACGGAGCTGAATAGCGTCTACATTGTTCCAGGAGTATATGGAGACAGACTTGGCGAA
 TGTGCTGGAGCAGGGCCCTTTACTGGAAGAGCATGCCAGGCTTTTCATGTATCAGCTGCTACGTGGGCTC
 AAATATATCCATTCTGCAAACGTAAGTGCACAGAGATCTCAAGCCAGCTAATCTTTTCATTAACACTGAAG
 ACTTGGTCTGAAGATAGGTGACTTTGGCTGGCAGGATCATGGATCCTCATTATCCCATAAGGGTCA
 TCTTTCTGAAGGATTGGTTACCAAATGGTACAGATCTCCACGGCTTTTACTTTCTCCTAATAATTACT
 AAAGCCATTGACATGTGGGCTGCAGGCTGCATCTTTGCTGAGATGCTGACTGGTAAAACCCCTCTTTGCGAG
 GTGCACATGAACCTGAACAGATGCAGCTGATCCTCGACTCCATCCCTGTTGTGCACGAGGAGGATCGGCA
 GGAGCTTCTCAGCGTGATTCCAGTTTACATTAGAAAACGACATGACTGAGCCACACAGACCCTCACTCAG
 CTGCTGCCGGGGATCAGCCGAGAAGCACTGGATTTCTGGAGCAGATTCTGACTTTCAGCCCCATGGACC
 GGCTGACAGCTGAGGAAGCCCTTTCCCATCCTTACATGAGCATCTACTCCTTCCCAGCGGATGAGCCCAT
 CTCAAGCCACCCTTTCCACATAGAGGACGAAGTGGACGACATTTTGCTTATGGATGAAACACACAGTCAC
 ATTTATAACTGGGAAAGGTACCACGATTGTGAGTCTCGGAGCATGACTGGCCTATTGATAACAACCTTTG
 ATATCGATGAGGTGACGTTGACCAAGAGCTCTGTCTGACGTCACCGATGAAGAAGAAGTCCAAGTTGA
 TCCTCGAAAATACTTGGATGGAGACCGAGAGAAGTATCTAGAGGATCCCGCCTTCGACACCAGCTACTCT
 GCTGAACCCTGCTGGCAGTACCCAGATCACACGAGAACAAGTACTGCGATCTGGAGTGTAGCCACACCT
 GTAACACAAAACAAGATCATCACCATACTTAGATAAACCTGGTGTGGAGGGAGAGCGAGGTTAACCATTA
 CTATGAGCCCAAGCTTATTATAGATCTTTCCAAGTGGAAAGAGCAAAGTAAAGAAAAATCCGATAAGAGA
 GGCAAGTCCAAGTGTGAGAGGAACGGGTTGGTCAAGGCGCAGATCGCGCTAGAGGAAGCATCCCAGCAGC
 TGGCTGAGAGGGAGAGGGCCCAAGGCTTCGACTTTGACTCCTTCATCGCGGGGACCATTGAGCTCAGTGC
 CCAGCATCAGTCTGCTGACGTAGTTGACAAGTTAAACGACTTGAATAGCTCAGTGTCCAGCTAGAATTG
 AAAAGCCTGATATCCAAGTCAGTCAGCCGAGAAAAGCAAGAAAAGGGAAGGGCTAACCTGGCCCAGCTGG
 GAGCCTTGATACCAGTCTCCTGGGACAGCCAGTTTGTGAGTGGCGGGGAGGAGTGTTCCTCATCAGTCA
 GTTTTGTTGTGAGGTGAGGAAGGACGAGCATGCGGAGAAGGAGAACACCTACACCAGCTATTTGGACAAG
 TTTTTTAGCAGGAAGGAGGATTCCGAAATGCTAGAAAAGTGGCCAGTGGAGGAAGGGAAGCGTGGGGAGA
 GAGGCCGTGAGGCAGGGCTTCTGAGCGGCGGTGGGGAGTTCTCCTGAGCAAGCAGCTGGAGTCCATAGG
 CACCCCGCAGTTCACAGCCAGTGGGGTCCCCACTCAAGTCCATCCAGGCCACCTTGACACCTTCCGCT
 ATGAAATCTTCCCTCAAATCCCTCACAAAGACATACAGCAGCATTCTGAAACATCTGAAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG210269 representing NM_027418
 Red=Cloning site Green=Tags(s)

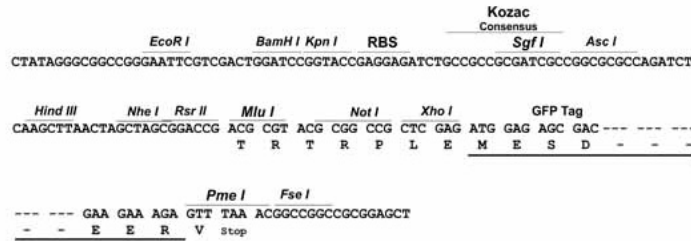
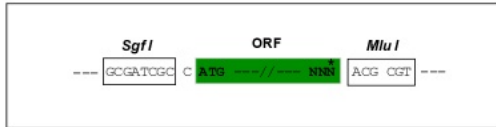
MAEKFESLMNIHGFDLGSRYMDLPLGCGGNL VFSAVDNDCDKRVAIKKIVL TDPQSVKHAPREIKIIR
 RLDHDNI VKVFEILGPSGSQLTDDVGS L TELNSVYIVQEYMETDLANVLEQGPLEEHARLFMYQLLRGL
 KYIHSANVLRDLK PANLFINTEDLV LKIGDFGLARIMDPHYSHKGHLSEGLVTKWYRSPRLLLSPNNYT
 KAIDMWAAGCIFAEMLTGKTLFAGAHELEQMQLILDSIPVVHEEDRQELLSVIPVYIRNDMTEPHRPLTQ
 LLPGISREALDFLEQILTFSPMDRLTAEALSHPYMSIYSFPTDEPISSHPFHIEDEVDDILLMDETHSH
 IYNWERYHDCQFSEHDWPIHNNFDIDEVQLDPRALSDVTDEEEVQVDPKYL DGDREKYLEDPADFTSYS
 AEPWCQYPDHENK YCDLECSHTCNYKTRSSPYLDNLVWRESEVNHYEPKLIIDL SNWKEQSKEKSDKR
 GKSKCERNGLVKAQIALEEASQQLAERERGGQFDFDSFIAGTIQLSAHQQSADVVDKLNLDLNSSVSQLEL
 KSLISKSVSREKQEKGRANLAQLGALYQSSWDSQFVSGGEECF LISQFCCEVRKDEHAEKENTYTSYLDK
 FFSRKEDSEMLETEPVEEGKRGERGREAGLLSGGGEFLLSKQLESIGTPQFHSPVGSPLKSIQATLTPSA
 MKSSPQIPHKTYSSILKHLN

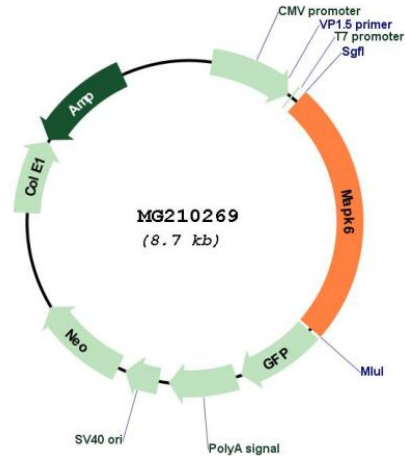
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:


ACCN: NM_027418

ORF Size: 2160 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_027418.1](#)

RefSeq Size: 4116 bp

RefSeq ORF: 2163 bp

Locus ID: 50772

UniProt ID: [Q61532](#)

Cytogenetics: 9 42.3 cM

Gene Summary: Atypical MAPK protein. Phosphorylates microtubule-associated protein 2 (MAP2) and MAPKAPK5. The precise role of the complex formed with MAPKAPK5 is still unclear, but the complex follows a complex set of phosphorylation events: upon interaction with atypical MAPKAPK5, ERK3/MAPK6 is phosphorylated at Ser-189 and then mediates phosphorylation and activation of MAPKAPK5, which in turn phosphorylates ERK3/MAPK6. May promote entry in the cell cycle.[UniProtKB/Swiss-Prot Function]