

Product datasheet for **MG205630**

Mapk13 (BC001992) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mapk13 (BC001992) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Mapk13
Synonyms:	SAPK4; Serk4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG205630 representing BC001992 Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGC**

ATGAGCCTCACTCGAAAAGGGGCTTCTACAAGCAGGACATCAACAAGACTGCCTGGGAGCTACCCAAGA
 CCTACCTGGCGCCCGCGCACGTGGCAGCGGGGCTATGGAGCGGTGTGCTCGGCCATCGACAAGCGGAC
 AGGGGAGAAGGTGGCCATCAAGAAGCTGAGCCGGCCCTCCAGTCGGAGATCTTTGCCAAGCGCGCTTAC
 CGCGAGCTTCTGCTCTTGAAGCACATGCACCATGAGAACGTCATTGGGCTTCTGGATGTCTTCACCCCTG
 CGTCTTCCCTTCGGAGCTTCCATGATTTCTACCTGGTGATGCCCTTCATGCAGACAGACCTACAGAAGAT
 CATGGGGATGGAATTCAGCGAGGATAAGGTCCAGTACTTGGTGTACCAGATGCTCAAAGGTCTAAAGTAC
 ATCCACTCCGCTGGCATCGTCCACAGGGACCTGAAACCGGGAACCTGGCTGTGAATGAAGACTGTGAGC
 TGAAGATCCTGGACTTTGGGCTGGCCGCCACACAGACTGAGATGACGGGCTATGTGGTGACCCGCTG
 GTACCGGGCCCCGAGGTGATCCTCAGCTGGATGCATTACAACCAGACAGTCGACATCTGGTCTGTTGGT
 TGCATCATGGCAGAAATGCTGACTGAAAGACACTCTTCAAGGGCAAGGACTACCTGGACCAGCTGACCC
 AGATCCTGAAAGTGACTGGGTGCCAGGTGCCGAGTTCGTGCAGAAGCTGAAAGACAAGGCGGCCAAATC
 CTATATTCAGTCCCTGCCCCAGAGCCCCAAGAAGGATTTACACAGCTCTTTCACGCGCCAGTCCGCAA
 GCTGCAGACCTGCTCGACAAGATGCTGGAGCTGGATGTGGACAAGCGTCTGACCGCTGCTCAGGCAGTGG
 CTACCCCTTCTTTGAACCTTCCGGGACCCTGAGGAGGAGACAGAGGCCAGCAGCCTTTTGATGATGC
 CTTAGAACATGAGAACTCAGTGTGGACGAATGGAACAACACATCTACAAGAGATCTCAAACCTCAGT
 CCCATAGCCCGAAGGACTCACGGCGACGAAGTGGCATGAAGCTGCAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA


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Protein Sequence: >MG205630 representing BC001992
Red=Cloning site Green=Tags(s)

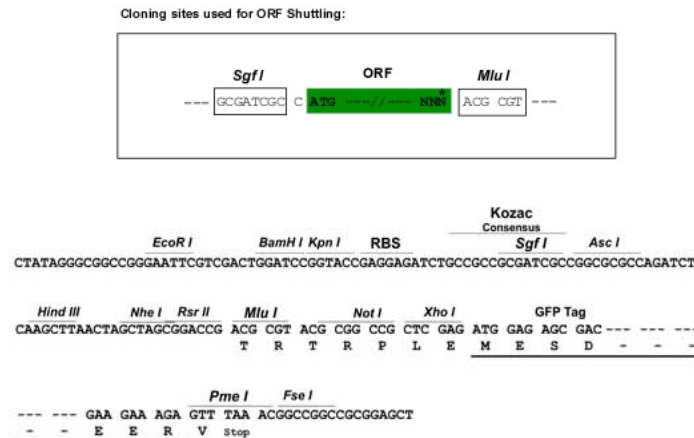
MSLTRKRGFYKQDINKTAWELPKTYLAPAHVGSGAYGAVCSAIDKRTGEKVAIKKLSRPFQSEIFAKRAY
RELLLLKHHHENVIGLLDVFTPASSLRSFHDYLVMPFMQTDLQKIMGMEFSEDKVQYL VYQMLKGLKY
IHSAGIVHRDLKPGNLAVNEDCELKILDFGLARHTDTEMTGYVVTRWYRAPEVILSWMHYNQTVDIWSVG
CIMAEMLTGKTLFKGKDYL DQLTQILKVTGVPGAEFVQKLKDKAAKSYIQSLPQSPKKDFTQLFPRASPQ
AADLLDKMLELDVDKRLTAAQALAHPPFEPFRDPEEETEAQQPFDDALEHEKLSVDEWKQHIYKEISNFS
PIARKDSRRRSGMKLQ

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: BC001992

ORF Size: 1098 bp

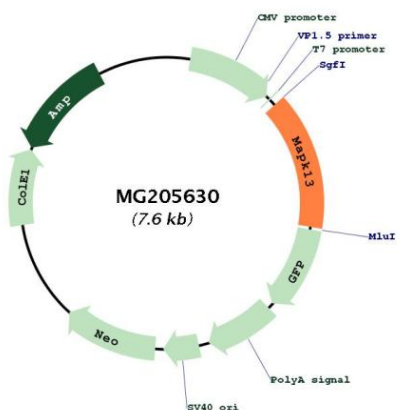
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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:	<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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>BC001992</u> , <u>AAH01992</u>
RefSeq Size:	1376 bp
RefSeq ORF:	1100 bp
Locus ID:	26415
Cytogenetics:	17 A3.3
Gene Summary:	<p>Serine/threonine kinase which acts as an essential component of the MAP kinase signal transduction pathway. MAPK13 is one of the four p38 MAPKs which play an important role in the cascades of cellular responses evoked by extracellular stimuli such as proinflammatory cytokines or physical stress leading to direct activation of transcription factors such as ELK1 and ATF2. Accordingly, p38 MAPKs phosphorylate a broad range of proteins and it has been estimated that they may have approximately 200 to 300 substrates each. MAPK13 is one of the less studied p38 MAPK isoforms. Some of the targets are downstream kinases such as MAPKAPK2, which are activated through phosphorylation and further phosphorylate additional targets. Plays a role in the regulation of protein translation by phosphorylating and inactivating EEF2K. Involved in cytoskeletal remodeling through phosphorylation of MAPT and STMN1. Mediates UV irradiation induced up-regulation of the gene expression of CXCL14. Plays an important role in the regulation of epidermal keratinocyte differentiation, apoptosis and skin tumor development. Phosphorylates the transcriptional activator MYB in response to stress which leads to rapid MYB degradation via a proteasome-dependent pathway. MAPK13 also phosphorylates and down-regulates PRKD1 during regulation of insulin secretion in pancreatic beta cells.[UniProtKB/Swiss-Prot Function]</p>

Product images:



Circular map for MG205630