

Product datasheet for **RG219603**

MAP4K4 (NM_145687) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MAP4K4 (NM_145687) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MAP4K4
Synonyms:	FLH21957; HEL-S-31; HGK; MEKKK4; NIK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG219603 representing NM_145687 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGAACGACTCCCCTGCAAAAAGTCTGGTGGACATCGACCTCTCCTCCCTGCGGGATCCTGCTGGGA
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GTTCCGCTCTGGTGGCAGCAGTCAAGTTTATTTTCATGACCTTAGGCAGGACTTCTCTCTGAGCTGG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG219603 representing NM_145687
 Red=Cloning site Green=Tags(s)

MANDSPAKSLVDIDLSSLRDPAGIFELVEVVNGTYGQVYKGRHVKTGQLAAIKVMDVTEDEEEEIKLEI
 NMLKKYSHHRNIATYYGAFIKKSPGHDDQLWLVMFCGAGSITDLVKNTKGNTLKEDWIAIYSREILRG
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 NLLVGTE SGLMLLDRSGQGVYPLINRRRFQ QMDVLEGLNVLVTISGKDKLRVYYLSWLRNKILHNDPE
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 VEEGQRLKVIYGCAGFHAVD VDSGSVYDIYLP THIQCSIKPHAI IILPNTDGMELLVCYEDEGVYVNTY
 GRITKDVVLQW GEMPTSVAYIRSNQTMGWGEKAI EIRSVETGHL DGVFMHKRAQLKFLCERNDKVFFAS
 VRSGGSSQVYFMTLGR TSLLSW

TRTRPLE - GFP Tag - V

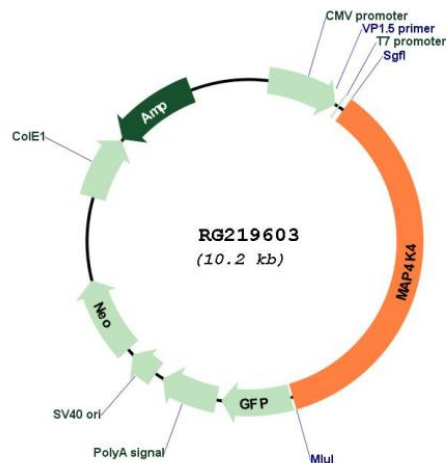
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_145687

ORF Size: 3636 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_145687.4](#)

RefSeq Size: 7102 bp

RefSeq ORF: 3639 bp

Locus ID: 9448

UniProt ID: [O95819](#)

Cytogenetics: 2q11.2

Domains:	pkinese, CNH, TyrKc, S_TKc
Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	MAPK signaling pathway
Gene Summary:	<p>The protein encoded by this gene is a member of the serine/threonine protein kinase family. This kinase has been shown to specifically activate MAPK8/JNK. The activation of MAPK8 by this kinase is found to be inhibited by the dominant-negative mutants of MAP3K7/TAK1, MAP2K4/MKK4, and MAP2K7/MKK7, which suggests that this kinase may function through the MAP3K7-MAP2K4-MAP2K7 kinase cascade, and mediate the TNF-alpha signaling pathway. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Jul 2008]</p>