

Product datasheet for **RG220487**

MAPKAP Kinase 2 (MAPKAPK2) (NM_004759) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MAPKAP Kinase 2 (MAPKAPK2) (NM_004759) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MAPKAPK2
Synonyms:	MAPKAP-K2; MK-2; MK2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG220487 representing NM_004759 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTGTCCAACCTCCAGGGCCAGAGCCCGCCGGTGCCGTTCCCCGCCCCGGCCCCGCCGCCAGCCCC
CCACCCCTGCCCTGCCGACCCCCCGGCCGAGCCGCCCGCCGCCCGCCCCGAGCAGTTCCCGCAGTTCCA
CGTCAAGTCCGGCCTGCAGATCAAGAAGAAGCCATCATCGATGACTACAAGGTACCAGCCAGGTCCTG
GGGCTGGGCATCAACGGCAAAGTTTGCAGATCTCAACAAGAGGACCCAGGAGAAATTCGCCCTCAAAA
TGCTTCAGGACTGCCCAAGGCCGAGGGAGGTGGAGCTGCACTGGCGGGCCTCCAGTCCCCGCACAT
CGTACGGATCGTGGATGTGTACGAGAATCTGTACGAGGGAGGAAGTGCCTGCTGATTGTCATGGAATGT
TTGGACGGTGGAGAACTCTTAGCCGAATCCAGGATCGAGGAGACCAGGCATTCACAGAAAGAGAAGCAT
CCGAAATCATGAAGAGCATCGGTGAGGCCATCCAGTATCTGCATTCAATCAACATTGCCCATCGGGATGT
CAAGCCTGAGAATCTCTTATACACCTCCAAAAGGCCAACGCCATCTGAAACTCACTGACTTTGGCTTT
GCCAAGGAAACCACAGCCACAACCTCTTGACCACTCCTTGTATACACCGTACTATGTGGCTCCAGAAG
TGCTGGGTCCAGAGAAGTATGACAAGTCTGTGACATGTGGTCCCTGGGTGTCATCATGTACATCCTGCT
GTGTGGGTATCCCCCTTCTACTCCAACCACGGCCTTGCCATCTCTCCGGCATGAAGACTCGCATCCGA
ATGGGCCAGTGAATTTCCCAACCCAGAATGGTCAGAAGTATCAGAGGAAGTGAAGATGCTCATTCGGA
ATCTGCTGAAAACAGAGCCACCCAGAGAATGACCATCACCGAGTTTATGAACCACCTTGATCATGCA
ATCAACAAGGTCCCTCAAACCCACTGCACACCAGCCGGTCTGAAGGAGGACAGGAGCGGTGGGAG
GATGTCAAGGGTGTCTTCATGACAAGAACAGCGACCAGGCCACTTGGCTGACCAGGTTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG220487 representing NM_004759
 Red=Cloning site Green=Tags(s)

MLSNSQGQSPVPFPAPAPPQPPTPALPHPPAQPPPPPPQFPQFHVKSGLQIKKNAIIDDYKVTSQVL
 GLGINGKVLQIFNKRTQEKFALKMLQDCPKARREVELHWRASQCPHIVRIVDYYENLYAGRKCLLI VMEC
 LDGGELFSRIQDRGDQAFTEREASEIMKSIGEAIQYLHSINIAHRDVKPENLLYTSKRPNAILKLTDFGF
 AKETTSHNSLTPCYTPYYVAPEVLGPEKYDKSCDMWSLGVIMYILLCGYPPFYNSHGLAISPGMKTRIR
 MGQYEFNPPEWSEVSEEVKMLIRNLLKTEPTQRMTITEFMNHPWIMQSTKVPQTLHTSRVLKEDKERWE
 DVKGCLHDKNSDQATWTRL

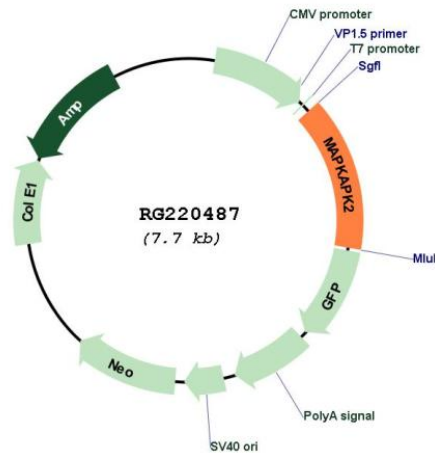
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_004759

ORF Size:	1110 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.
RefSeq:	NM_004759.5
RefSeq Size:	3608 bp
RefSeq ORF:	1113 bp
Locus ID:	9261
UniProt ID:	P49137
Cytogenetics:	1q32.1
Domains:	pkinase, TyrKc, S_TKc
Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	MAPK signaling pathway, Neurotrophin signaling pathway, VEGF signaling pathway
Gene Summary:	This gene encodes a member of the Ser/Thr protein kinase family. This kinase is regulated through direct phosphorylation by p38 MAP kinase. In conjunction with p38 MAP kinase, this kinase is known to be involved in many cellular processes including stress and inflammatory responses, nuclear export, gene expression regulation and cell proliferation. Heat shock protein HSP27 was shown to be one of the substrates of this kinase in vivo. Two transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]