

Product datasheet for RG200358

OriGene Technologies, Inc.

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MAPKAP Kinase 3 (MAPKAPK3) (NM_004635) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: MAPKAP Kinase 3 (MAPKAPK3) (NM 004635) Human Tagged ORF Clone

Tag: TurboGFP

Symbol: MAPKAP Kinase 3

Synonyms: 3PK; MAPKAP-K3; MAPKAP3; MAPKAPK-3; MDPT3; MK-3; MK3

Mammalian Cell

Selection:

Neomycin

Vector: pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >RG200358 representing NM_004635

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGATGGTGAAACAGCAGAGGAGCAGGGGGGCCCTGTGCCCCCGCCAGTTGCACCCGGCGGACCCGGCT TGGGCGGTGCTCCGGGGGGGCGGGGGGCCCAAGAAGTACGCAGTGACCGACGACTACCAGTTGTCCAA GCAGGTGCTGGGCCTGGGTGTGAACGGCAAAGTGCTGGAGTGCTTCCATCGGCGCACTGGACAGAAGTGT GCCCTGAAGCTCCTGTATGACAGCCCCAAGGCCCGGCAGGAGGTAGACCATCACTGGCAGGCTTCTGGCG GCCCCCATATTGTCTGCATCCTGGATGTGTATGAGAACATGCACCATGGCAAGCGCTGTCTCCTCATCAT CATGGAATGCATGGAAGGTGGTGAGTTGTTCAGCAGGATTCAGGAGCGTGGCGACCAGGCTTTCACTGAG AGAGAAGCTGCAGAGATAATGCGGGATATTGGCACTGCCATCCAGTTTCTGCACAGCCATAACATTGCCC ACCGAGATGTCAAGCCTGAAAACCTACTCTACACATCTAAGGAGAAAGACGCAGTGCTTAAGCTCACCGA TTTTGGCTTTGCTAAGGAGACCACCCAAAATGCCCTGCAGACACCCTGCTATACTCCCTATTATGTGGCC CCTGAGGTCCTGGGTCCAGAGAAGTATGACAAGTCATGTGACATGTGGTCCCTGGGTGTCATCATGTACA TCCTCCTTTGTGGCTTCCCACCCTTCTACTCCAACACGGGCCAGGCCATCTCCCCGGGGATGAAGAGGAG GATTCGCCTGGGCCAGTACGGCTTCCCCAATCCTGAGTGGTCAGAAGTCTCTGAGGATGCCAAGCAGCTG ATCCGCCTCCTGTTGAAGACAGACCCCACAGAGAGGCTGACCATCACTCAGTTCATGAACCACCCCTGGA TCAACCAATCGATGGTAGTGCCACAGACCCCACTCCACACGGCCCGAGTGCTGCAGGAGGACAAAGACCA CTGGGACGAAGTCAAGGAGGAGATGACCAGTGCCTTGGCCACTATGCGGGTAGACTACGACCAGGTGAAG CTGCCTCACAGGGCTGCAACAACCAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA





Protein Sequence: >RG200358 representing NM_004635

Red=Cloning site Green=Tags(s)

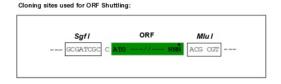
MDGETAEEQGGPVPPPVAPGGPGLGGAPGGRREPKKYAVTDDYQLSKQVLGLGVNGKVLECFHRRTGQKC ALKLLYDSPKARQEVDHHWQASGGPHIVCILDVYENMHHGKRCLLIIMECMEGGELFSRIQERGDQAFTE REAAEIMRDIGTAIQFLHSHNIAHRDVKPENLLYTSKEKDAVLKLTDFGFAKETTQNALQTPCYTPYYVA PEVLGPEKYDKSCDMWSLGVIMYILLCGFPPFYSNTGQAISPGMKRRIRLGQYGFPNPEWSEVSEDAKQL IRLLLKTDPTERLTITQFMNHPWINQSMVVPQTPLHTARVLQEDKDHWDEVKEEMTSALATMRVDYDQVK IKDLKTSNNRLLNKRRKKQAGSSSASQGCNNQ

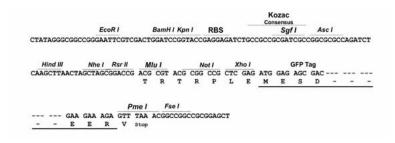
TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:





ACCN: NM_004635

ORF Size: 1146 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: <u>NM 004635.4</u>

 RefSeq Size:
 2500 bp

 RefSeq ORF:
 1149 bp

 Locus ID:
 7867

 UniProt ID:
 Q16644

 Cytogenetics:
 3p21.2

Domains: pkinase, TyrKc, S_TKc

Protein Families: Druggable Genome, Protein Kinase

Protein Pathways: MAPK signaling pathway, VEGF signaling pathway

Gene Summary: This gene encodes a member of the Ser/Thr protein kinase family. This kinase functions as a

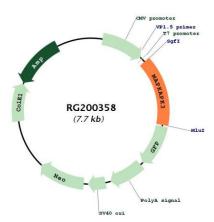
mitogen-activated protein kinase (MAP kinase)- activated protein kinase. MAP kinases are also known as extracellular signal-regulated kinases (ERKs), act as an integration point for multiple biochemical signals. This kinase was shown to be activated by growth inducers and stress stimulation of cells. In vitro studies demonstrated that ERK, p38 MAP kinase and Jun N-terminal kinase were all able to phosphorylate and activate this kinase, which suggested the

role of this kinase as an integrative element of signaling in both mitogen and stress

responses. This kinase was reported to interact with, phosphorylate and repress the activity of E47, which is a basic helix-loop-helix transcription factor known to be involved in the regulation of tissue-specific gene expression and cell differentiation. Alternate splicing results in multiple transcript variants that encode the same protein. [provided by RefSeq, Sep 2011]



Product images:



Circular map for RG200358