

Product datasheet for **RG200069**

ZAK (MAP3K20) (NM_133646) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ZAK (MAP3K20) (NM_133646) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ZAK
Synonyms:	AZK; CNM6; MLK7; mlklak; MLT; MLTK; MLTKalpha; MLTKbeta; MRK; pk; SFMMP; ZAK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG200069 representing NM_133646
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGTCGCTCTCGGTGCCTCCTTTGTGCAAATTAATTTGATGACTTGCAGTTTTTTGAAAACGCGGTG
 GAGGAAGTTTTGGGAGTGTATTTCGAGCCAATGGATATCACAGGACAAGGAGGTGGCTGTAAAGAAGCT
 CCTCAAAATAGAGAAAGAGGCAGAAATACTCAGTGCCTCAGTCACAGAAACATCATCCAGTTTTATGGA
 GTAATTCTTGAACCTCCCAACTATGGCATTGTCACAGAATATGCTTCTCTGGGATCACTCTATGATTACA
 TTAACAGTAACAGAAGTGAGGAGATGGATATGGATCACATTATGACCTGGGCCACTGATGTAGCCAAAGG
 AATGCATTATTTACATATGGAGGCTCCTGTCAAGGTGATTCACAGAGACCTCAAGTCAAGAAACGTTGTT
 ATAGCTGCTGATGGAGTATTGAAGATCTGTGACTTTGGTGCCTCTCGTTCCATAACCATAACAACACACA
 TGTCCTTGGTTGGAACCTTCCCATGGATGGCTCCAGAAGTTATCCAGAGTCTCCCTGTGCAGAACTTG
 TGACACATATTCCTATGGTGTGGTTCTCTGGGAGATGCTAACAAGGGAGGTCCCTTTAAAGGTTTGGAA
 GGATTACAAGTAGCTTGGCTTGTAGTGGAAAAAACGAGAGATTAACCATTCCAAGCAGTTGCCCCAGAA
 GTTTTGCTGAACTGTTACATCAGTGTGGGAAGCTGATGCCAAGAAGCGCCATCATTCAAGCAAATCAT
 TTCAATCTGGAGTCCATGTCAAATGACACGAGCCTTCTGACAAGTGTAACTATTCTACACAACAAG
 GCGGAGTGGAGGTGCGAAATTGAGGCAACTCTTGAGAGGCTAAAGAACTAGAGCGTGATCTCAGCTTTA
 AGGAGCAGGAGCTTAAAGAACGAGAAAGACGTTTAAAGATGTGGGAGCAAAGCTGACAGAGCAGTCCAA
 CACCCCGCTTCTTTCCTTCTGCTGCAAGAATGTCTGAGGAGTCTTACTTTGAATCTAAAACAGAGGAG
 TCAAACAGTGCAGAGATGCATGTCAGATCACAGCAACAAGTACGGGGAGGGCCATGCCATGAACCCAA
 GTCTGCAGGCCATGATGCTGATGGCTTTGGGGATATCTTCTCAATGAACAAAGCAGGAGCTGTGATGCA
 TTCTGGGATGCAGATAAACATGCAAGCCAAGCAGAATTCTTCCAAAACCACATCTAAGAGAAGGGGGAAG
 AAAGTCAACATGGCTCTGGGTTCAAGTATTTGACTTGTGAGAAGGTGACGATGATGATGATGATGACG
 GTGAGGAGGAGGATAATGACATGGATAATAGTAA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG200069 representing NM_133646
 Red=Cloning site Green=Tags(s)

MSSLGASFVQIKFDDLQFFENCSSGSGSVYRAKVISQDKEVAVKLLKIEKEAELSVLSHRNIIQFYG
 VILEPPNYGIVTEYASLGSLYDYINSNRSEEMDMHIMTWATDVAKGMHYLHMEAPVKVIHRDLKSRNVV
 IAADGVLIKICDFGASRFHNHTHMSLVGTFPWWAPEVIQSLPVSETCDTYSYGVVLWEMLTREVPFKGLE
 GLQVAVLVVEKNERLTIPSSCPRSFAELLHQWEADAKKRPSFKQIISILESMSNDTSLPDKCNSFLHNK
 AEWRCIEATLERLKKLERDL SFKEQELKERERRLKMWEQKL TEQSNTPLLLPLAARMSEESYFESKTEE
 SNSAEMSCQITATSNGEHGMNPSLQAMMLMGFDIFSMNKAGAVMHSGMQINMQAKQNSSKTTSKRRGK
 KVNMAALGFSDFDLSEGDDDDDDGEEEDNDMDNSE

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_133646

ORF Size: 1365 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_133646.3](#)

RefSeq Size: 7194 bp

RefSeq ORF: 1368 bp

Locus ID: 51776

UniProt ID: [Q9NYL2](#)

Cytogenetics: 2q31.1

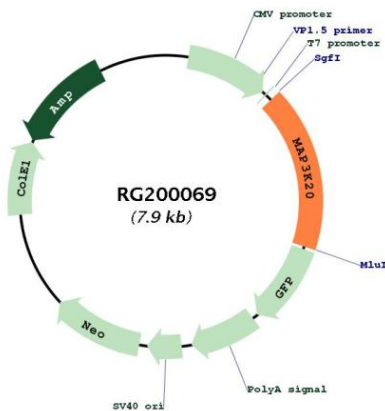
Domains: pkinase, TyrKc, S_TKc

Protein Families: Druggable Genome, Protein Kinase

Protein Pathways: MAPK signaling pathway, Tight junction

Gene Summary: This gene is a member of the MAPKKK family of signal transduction molecules and encodes a protein with an N-terminal kinase catalytic domain, followed by a leucine zipper motif and a sterile-alpha motif (SAM). This magnesium-binding protein forms homodimers and is located in the cytoplasm. The protein mediates gamma radiation signaling leading to cell cycle arrest and activity of this protein plays a role in cell cycle checkpoint regulation in cells. The protein also has pro-apoptotic activity. Alternate transcriptional splice variants, encoding different isoforms, have been characterized. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG200069