

Product datasheet for **RG211795**

TAK1 (MAP3K7) (NM_145331) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TAK1 (MAP3K7) (NM_145331) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MAP3K7
Synonyms:	CSCF; FMD2; MEKK7; TAK1; TGF1a
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG211795 representing NM_145331
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCTACAGCCTCTGCCGCTCCTCCTCCTCGTCTTCGGCCGGTGAGATGATCGAAGCCCCTTCCC
 AGGTCTCAACTTTGAAGAGATCGACTACAAGGAGATCGAGGTGGAAGAGTTGTTGGAAGAGGAGCCTT
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 AGGAAAGCGTTTATTGTAGAGCTTCGGCAGTTATCCCCTGTGAACCATCTAATATTGTAAGCTTTATG
 GAGCCTGCTTGAATCCAGTGTGCTTGTGATGGAATATGCTGAAGGGGGCTTTTATAATGTGCTGCA
 TGGTGTGAACCATGCCATATTACTGCTGCCACGCAATGAGTTGGTGTTCACAGTGTCCCAAGGA
 GTGGCTTATCTTACAGCATGCAACCCAAAGCGCTAATTCACAGGGACCTGAAACCACAACTTACTGC
 TGGTTGCAGGGGGACAGTTCTAAAAATTTGTGATTTTGGTACAGCCTGTGACATTCAGACACACATGAC
 CAATAACAAGGGGAGTGTGCTTGGATGCCACCTGAAGTTTTTGAAGGTAGTAATTACAGTGAAAAATGT
 GACGCTTTCAGCTGGGGTATTATTCTTTGGGAAGTGATAACGCGTCGAAACCCTTTGATGAGATTGGTG
 GCCCAGCTTTCGAATCATGTGGGCTGTTTATAATGGTACTCGACCACCCTGATAAAAAATTTACCTAA
 GCCCATTGAGAGCCTGATGACTCGTTGTTGGTCTAAAGATCCTTCCCAGCGCCCTTCAATGGAGGAAATT
 GTGAAAAATAGACTCACTTGTGCGGTACTTTCCAGGAGCAGATGAGCCATTACAGTATCCTTGTGAGT
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 GGATCAGATAACTCCATCCCAATGGCTTATCTTACTGGATCACCACCTACAGCCTCTAGCACCCTGCC
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 AACAGAAATTGCATTGTTATTACAGAGAAAGCAAGAACTAGTTGCAGAACTGGACCAGGATGAAAAGGAC
 CAGCAAAATACATCTCGCCTGGTACAGGAACATAAAAAGCTTTTATAGTAAAAACAAAAGCCTTTCTACTT
 ACTACCAGCAATGCAAAAAACAACCTAGAGGTCATCAGAAGTCAGCAGCAGAAACGACAAGGCACTTCA

AC**GGGCCGCTCGAG** - GFP Tag - GTTTAA

Protein Sequence:

>RG211795 representing NM_145331
 Red=Cloning site Green=Tags(s)

MSTASAASSSSSSSAGEMIEAPSQVLNFFEEIDYKEIEVEEVVGRGAFGVVCKAKWRAKDVAIKQIESESE
 RKAFIVELRQLSRVNHPIVVKLYGACLNVPCLVMEYAEGGSLYNVLHGAELPPYYTAAHAMSWLQCSQG
 VAYLHSMQPKALIHRDLKPPNLLL VAGGTVLKICDFGTACDIQTHMTNNGSAAWMAPEVFEGSNYSEKC
 DVFSWGIILWEVITRRKPFDEIGGPAFRIMWAVHNGTRPPLIKNLPKPIESLMTRCWSKDPSQRPSMEEI
 VKIMTHLMRYFPGADEPLQYPCQYSDEGQNSATSTGFMDIASNTSNKSDTNMEQVPATNDTIKRLS
 KLLKNQAKQQSESGRLSLGASRGSSVESLPPTSEGKRMSADMSEIEARIAATTAYSKPKRGRHRTASFGN
 ILDVPEIVIISGNGQPRRRSIQDLTVTGTGTEPGQVSSRSPSVRMIITTSPTSEKPTRSHPWTPDDSTDTN
 GSDNSIPMAYLTLDHQLQPLAPCPNSKESMAVFEQHCKMAQEYMKVQTEIALLLQRKQELVAELDQDEK
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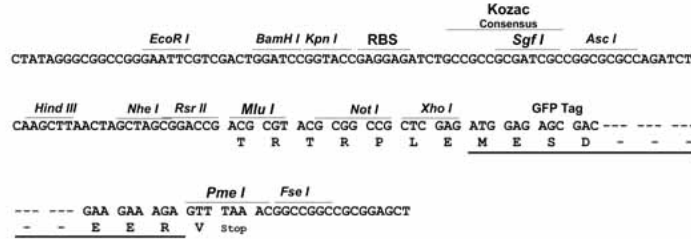
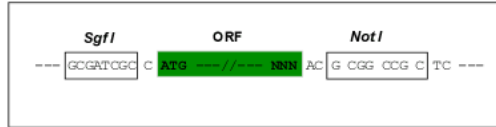
TRPLE - GFP Tag - V

Restriction Sites:

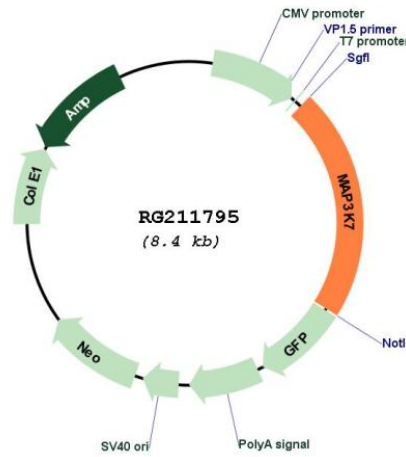
Sgfl-NotI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_145331

ORF Size: 1818 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_145331.3
RefSeq Size:	2850 bp
RefSeq ORF:	1821 bp
Locus ID:	6885
UniProt ID:	O43318
Cytogenetics:	6q15
Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	Adherens junction, MAPK signaling pathway, NOD-like receptor signaling pathway, RIG-I-like receptor signaling pathway, T cell receptor signaling pathway, Toll-like receptor signaling pathway, Wnt signaling pathway
Gene Summary:	The protein encoded by this gene is a member of the serine/threonine protein kinase family. This kinase mediates the signaling transduction induced by TGF beta and morphogenetic protein (BMP), and controls a variety of cell functions including transcription regulation and apoptosis. In response to IL-1, this protein forms a kinase complex including TRAF6, MAP3K7P1/TAB1 and MAP3K7P2/TAB2; this complex is required for the activation of nuclear factor kappa B. This kinase can also activate MAPK8/JNK, MAP2K4/MKK4, and thus plays a role in the cell response to environmental stresses. Four alternatively spliced transcript variants encoding distinct isoforms have been reported. [provided by RefSeq, Jul 2008]