

Product datasheet for **RG208522**

TAB1 (NM_006116) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TAB1 (NM_006116) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	TAB1
Synonyms:	3'-Tab1; MAP3K7IP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG208522 representing NM_006116
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCGGCGCAGAGGAGGAGCTTCTGTCAGAGTGAAGCAGAGCAAGCTGGACAGATGACCTGCCTCTCT
 GCCACCTCTCTGGGGTTGGCTCAGCCTCCAACCGCAGCTACTCTGCTGATGGCAAGGGCACTGAGAGCCA
 CCCGCCAGAGGACAGCTGGCTCAAGTTCAGGAGTGAGAACAACCTGCTTCCTGTATGGGGTCTTCAACGGC
 TATGATGGCAACCGAGTGACCAACTTCGTGGCCAGCGGTGTCCGACAGAGCTCCTGCTGGGCCAGCTGA
 ATGCCGAGCAGCCGAGGCCGATGTGCGGCGTGTGCTGCTGCAGGCCCTTCGATGTGGTGGAGAGGAGCTT
 CCTGGAGTCCATTGACGACGCCTTGGCTGAGAAGGCAAGCCTCCAGTCGCAATTGCCAGAGGGAGTCCCT
 CAGCACCAGCTGCCTCCTCAGTATCAGAAGATCCTTGAGAGACTCAAGACGTTAGAGAGGGAAATTCGG
 GAGGGGCCATGGCCGTTGTGGCGTCTTCTCAACAACAAGCTCTACGTCGCCAATGTCGGTACAAACCG
 TGCACTTTTATGCAAATCGACAGTGGATGGGTTGCAGGTGACACAGCTGAACGTGGACCACACCACAGAG
 AACGAGGATGAGCTTCCGCTTTTCGACGCTGGGCTTGGATGCTGGAAAGATCAAGCAGGTGGGGATCA
 TCTGTGGGCAGGAGAGCACCCGCGGATCGGGATTACAAGTTAAATATGGCTACACGGACATTGACCT
 TCTCAGCGCTGCCAAGTCAAACCAATCATCGCAGAGCCAGAAATCCATGGGGCACAGCCGCTGGATGGG
 GTGACGGGCTTCTTGGTCTGATGTGCGAGGGGTTGTACAAGGCCCTAGAGGCAGCCCATGGGCCTGGGC
 AGGCCAACCGAGAGATTGCTGCGATGATTGACACTGAGTTTGCCAAGCAGACCTCCCTGGACGCAGTGGC
 CCAGGCCGTCGTGGACCGGGTGAAGCGCATCCACAGCGACACCTTCGCCAGTGGTGGGGAGCGTGCCAGG
 TTCTGCCCCGGCAGGAGACATGACCTGCTAGTGAGGAACCTTGGCTACCCGCTGGGCGAAATGAGCC
 AGCCACACCGAGCCAGCCAGCCAGCTGACAGGAGGACGAGTGTACCCTGTGTCTGTGCCATACTCCAGCGC
 CCAGAGCACAGCAAGACCAGCGTGACCTCTCCCTTGTATGCCCTCCAGGGCCAGATGGTCAACGGG
 GCTCACAGTGTTCCACCCTGGACGAAGCCACCCACCCTCACCAACCAAGCCGACCTTAACCTGTC
 AGTCCACCAACACGCACACGCAGAGCAGCAGCTCCAGCTGACGAGGAGCCTTCTCCGCTCCCGGCCCGC
 CCACTCGCTCCCGCTGGCGAGGACGGTGTGTTGAGCCCTATGTGGACTTTGCTGAGTTTTACCGCCTC
 TGGAGCGTGGACCATGGCGAGCAGAGCGTGGTACAGCACCG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG208522 representing NM_006116
 Red=Cloning site Green=Tags(s)

MAAQRRLQSEQQPSWTDLPLCHLSVGSASNRSYSADGKGTESHPPEDESWLKFRSENNCFLYGVFNG
 YDGNRVTFVAQRLSAELLLGQLNAEHAADVRRVLLQAFDIVERSFLESIDDALEKASLQSQLPEGVP
 QHQLPPQYQKILERLKTLEIEISGAMAVVAVLLNNKLYVANVTNRALLCKSTVDGLQVTLNVDHTTE
 NEDELFRSLQLDAGKIKQVGIICGQESTRRIGDYKVKYGYTDIDLLSAKSKPIIAEPEIHGAQPLDG
 VTGFLVLMSEGLYKALEAAHGPGQANQEIAAMIDTEFAKQTSLDAVAQAVVDRVKRIHSDTFASGGERAR
 FCPRHEDMTLLVRNFGYPLGEMSQPTSPAPAAGGRVYPVSPYSSAQSTSKTSVTLVMPVQGMVNG
 AHSASTLDEATPTLTNQSPTLTQSTNHTQSSSSSDGGLFRSRPAHSLPPGEDGRVEPYVDFAEFYRL
 WSDVHGEQSVVTAP

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_006116

ORF Size: 1512 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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:

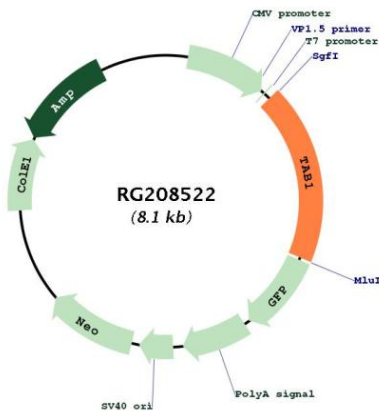
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store 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_006116.3](#)

RefSeq Size: 3240 bp
RefSeq ORF: 1515 bp
Locus ID: 10454
UniProt ID: [Q15750](#)
Cytogenetics: 22q13.1
Domains: PP2C
Protein Families: Druggable Genome
Protein Pathways: MAPK signaling pathway, NOD-like receptor signaling pathway, Toll-like receptor signaling pathway

Gene Summary: The protein encoded by this gene was identified as a regulator of the MAP kinase kinase kinase MAP3K7/TAK1, which is known to mediate various intracellular signaling pathways, such as those induced by TGF beta, interleukin 1, and WNT-1. This protein interacts and thus activates TAK1 kinase. It has been shown that the C-terminal portion of this protein is sufficient for binding and activation of TAK1, while a portion of the N-terminus acts as a dominant-negative inhibitor of TGF beta, suggesting that this protein may function as a mediator between TGF beta receptors and TAK1. This protein can also interact with and activate the mitogen-activated protein kinase 14 (MAPK14/p38alpha), and thus represents an alternative activation pathway, in addition to the MAPKK pathways, which contributes to the biological responses of MAPK14 to various stimuli. Alternatively spliced transcript variants encoding distinct isoforms have been reported. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG208522