

## Product datasheet for **RC239247**

### **TAB2 (NM\_001292035) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	TAB2 (NM_001292035) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TAB2
Synonyms:	CHTD2; MAP3K7IP2; TAB-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide  
Sequence:

>RC239247 representing NM\_001292035  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGCAGAATAATAAACCTGGATGCTGCTGTGCTGTTCTCTCTCAGGAGAGTACAAGATATCTTTATG  
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CTTGGAAGTGAATCACAGAACATTTACCACCATGGAAGAGAAGGAAGTAGGATGAATGGAAGTAGGACT  
CTAACGCACAGCATTAGTGATGGACAACCTCAAGGTGGCCAGTCCAATAGTGAACATTTTCAGCAGGAGC  
CACAGACAGCACCAGCTCAAGTTCCTCAAGGCTTAAATGTTTTGGAAATGTCCAGTTCCTCTGGTCTTC  
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AACCTCAGCAAGTTTATCAGCCTTACAGCCTGGTCCCTGGACTACTTGTCTGCATCTAATCCTCTGT  
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CTTAAACAGAAATCAGCCCACTGTTTACATAGCTGCCAGCCCCCAAATACGGATGAGCTGATGTCCCGT  
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CACTTTCATATCCACAACTCTGGAGCATCTGCTGCCCTCCAGGAACATGTCTGGGCAAGTGAAGCATGGG  
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TCTGTGCCACCAAAACCAAGATCAAAGTCCATCATCAAACACCAAGACTCAAGACACAGAAGAT  
GATGAGGGAGCTCAGTGGAAATGTACCGCTGACTTTTTTGAACCATCCAGCCTTAATTCGCTGTGAAC  
AGTGTGAGATGCCAAGGCATTTT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC239247 representing NM\_001292035  
Red=Cloning site Green=Tags(s)

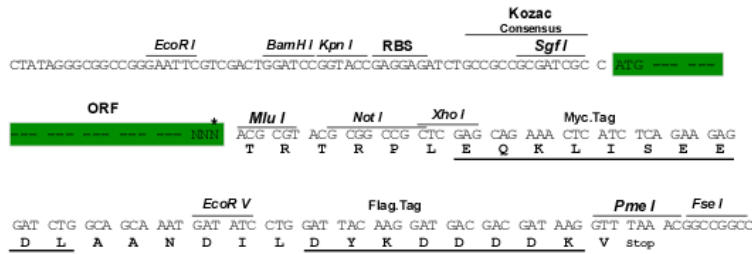
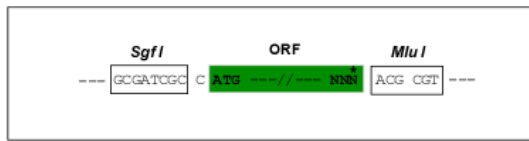
MQNNNLDACCAVLSQESTRYLYGEGDLNFSDDSGISGLRNHMTSLNLDLQSQNIYHHGREGRMNGSRT  
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 RFNPIMVTLAPNIQTGRNTP TSLHIHGVPVPLNSPQGN SIYIRPYITTPGGTTRQTQHSWVVSQFNPM  
 NPQQVYQPSQPGPWTTCPASNPLSHTSSQQP NQGHTSHVYMPISSPTTSQPPTIHS SSSQSSAHSQY  
 NIQNI STGPRKNQIEIKLEPPQRNNSKLRSSGPRTSSTSSVNSQTLNRNQPTVYIAASPNTDELMR  
 SQPKVYISANAATGDEQVMRNQPTLFISTNSGASAASRNMSGQVSMGPAFIHHHPKSR AIGNNSATSPR  
 VVYVTPNTKYTFKITVSPNKP PAVSPGVVSPTFELTNLLNHPDHVYETENIQHLTDPTLAHVDRIS ETRK  
 LSMGSDDAAYTQALLVHQKARMERLQRELEIQKKL DKLKSEVNEMENL TRRLKRSNSISQIP SLEEM  
 QQLRSCNRQLQIDIDCLTKEIDLFQARGPHFNPSAIHNFYDNI GFVGPVPPKPKDQRSIIKTPKTQDTE  
 DEGAQWNCTACTFLNHPALIRCEQCEMPRHF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**  
**Cloning Scheme:**

SgfI-MluI

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001292035  
**ORF Size:** 1983 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](mailto: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\\_001292035.3](#)

**RefSeq Size:** 4206 bp

**RefSeq ORF:** 1986 bp

**Locus ID:** 23118

**UniProt ID:** [Q9NYJ8](#)

**Cytogenetics:** 6q25.1

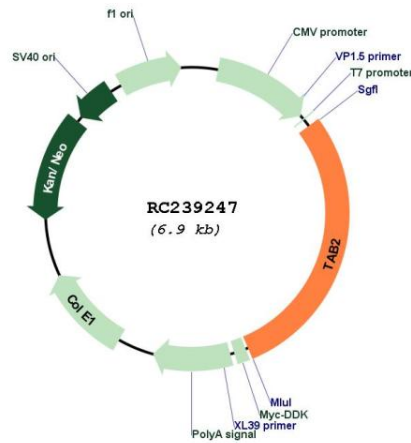
**Protein Families:** Druggable Genome

**Protein Pathways:** MAPK signaling pathway, NOD-like receptor signaling pathway, Toll-like receptor signaling pathway

**MW:** 73.3 kDa

**Gene Summary:**

The protein encoded by this gene is an activator of MAP3K7/TAK1, which is required for for the IL-1 induced activation of nuclear factor kappaB and MAPK8/JNK. This protein forms a kinase complex with TRAF6, MAP3K7 and TAB1, and it thus serves as an adaptor that links MAP3K7 and TRAF6. This protein, along with TAB1 and MAP3K7, also participates in the signal transduction induced by TNFSF11/RANKI through the activation of the receptor activator of NF-kappaB (TNFRSF11A/RANK), which may regulate the development and function of osteoclasts. Studies of the related mouse protein indicate that it functions to protect against liver damage caused by chemical stressors. Mutations in this gene cause congenital heart defects, multiple types, 2 (CHTD2). Alternative splicing results in multiple transcript variants. [provided by RefSeq, May 2014]

**Product images:**


Circular map for RC239247