

# Product datasheet for RC204454L2

### OriGene Technologies, Inc.

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## TAK1 (MAP3K7) (NM\_003188) Human Tagged Lenti ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** TAK1 (MAP3K7) (NM\_003188) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: TAK1

**Synonyms:** CSCF; FMD2; MEKK7; TAK1; TGF1a

Mammalian Cell None

Selection:

**Vector:** pLenti-C-mGFP (PS100071)

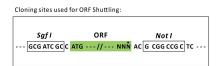
E. coli Selection: Chloramphenicol (34 ug/mL)

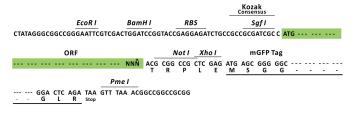
ORF Nucleotide The ORF insert of this clone is exactly the same as(RC204454).

Sequence:

**Restriction Sites:** Sgfl-Notl

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF.

**ACCN:** NM\_003188

ORF Size: 1737 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 <a href="mailto:customport@origene.com">customport@origene.com</a> 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:

Cytogenetics:

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 003188.2</u>

 RefSeq Size:
 2912 bp

 RefSeq ORF:
 1740 bp

 Locus ID:
 6885

 UniProt ID:
 043318

**Domains:** pkinase, TyrKc, S\_TKc

**Protein Families:** Druggable Genome, Protein Kinase

6q15

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

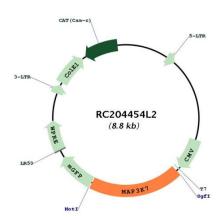
**MW:** 64 kDa



#### **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]

## **Product images:**



Circular map for RC204454L2