

## Product datasheet for RC214344

### TAOK2 (NM\_004783) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	TAOK2 (NM_004783) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TAOK2
Synonyms:	MAP3K17; PSK; PSK1; PSK1-BETA; TAO1; TAO2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC214344 representing NM_004783 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCCAGCTGGGGCCGGGCCGGGAGCCTGAAGGACCCAGATGTGGCTGAGCTCTTCTTCAAGGATGACC  
CAGAAAAGCTCTTCTCTGACCTCCGGGAAATTGGCCATGGCAGCTTTGGAGCCGTATACTTTGCCGGGA  
TGTCGGGAATAGTGAGGTGGTGGCCATCAAGAAGATGTCTACAGTGGGAAGCAGTCCAATGAGAAATGG  
CAAGACATCATCAAGGAGGTGCGGTTCTTACAGAAGCTCCGGCATCCCAACACCATTAGTACCGGGGCT  
GTTACCTGAGGGAGCACACGGCTTGGCTGGTAATGGAGTATTGCCTGGGCTCAGCTTCTGACCTTCTAGA  
AGTGACACAAGAAACCCCTTCAGGAGGTAGAGATCGCAGCTGTGACCCACGGGGCGCTTCAGGGCCTGGCA  
TATCTGCACTCCCAACATGATCCATAGGGATGTGAAGGCTGGAACATCCTGTCTGACAGCCAGGGT  
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CTGGATGGCACCCGAGGTGATCCTGGCCATGGATGAGGGGCAGTACGATGGCAAAGTGGACGTCTGGTCC  
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TATACCACATTGCACAGAACGAATCCCCGTGCTCCAGTCAGGACACTGGTCTGAGTACTCCGGAATTT  
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TGGACAACCTGCAGTACCGCAAGATGAAGAAGATCCTGTTCCAAGAGGCACCCAACGGCCCTGGTGCCGA  
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CCTCAGACAACGAGGAAGAGGAGGAGGAGGAGGAAGAGGAGGAGGAGGAAGAAGGCCCTGAAGCCCG  
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GGCTCTGACAACCTATATGATGACCCCTACCAGCCAGAGATAACCCCAAGCCCTCCTCAGCCGCTGCAG  
CCCCAGCTCCCACTTCCACCACCTTCCGCCCGCCGGGCCCTACTGCCGTAACCGAGACCACCTTTGC  
CACCATCCGAACCGCCTCCTGGTCAGCGTCAGATCCAGGAGCATGAGCAGGACTCTGCGCTGCGGGAG



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CAGCTGAGCGGCTATAAGCGGATGCGACGACAGCACCAGAAGCAGCTGCTGGCCCTGGAGTCACGGCTGA  
 GGGTGAACGGGAGGAGCACAGTGCACGGCTGCAGCGGGAGCTTGAAGCGCAGCGGGCTGGCTTTGGGGC  
 AGAGGCAGAAAAGCTGGCCCGCGGCACCAGGCCATAGGTGAGAAGGAGGCACGAGCTGCCAGGCCGAG  
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 TGGCTGGGGCCCCACAAAGTGGGACACCCGTGGCGGAGCCCTGCTGCTGCTAAGAAACAGCCCC  
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 CGGGCCCTGAGCCGACGACCAAGTGTCCGTTCCACATCCTCAATGTTCTTCCACTTCTATTCC

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 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC214344 representing NM\_004783  
 Red=Cloning site Green=Tags(s)

MPAGGRAGSLKDPVAELFFKDDPEKLFSDLREIGHGSFGAVYFARDVRNSEVVAIKKMSYSGKQSNEKW  
 QDIIKEVRFLLQKLRHPNTIQYRGCYLREHTAWLVMEYCLGSASDLLEVHKKPLQEVEIAAVTHGALQGLA  
 YLHSHNMIHRDVKAGNILLSEPLVKLGDGFSASIMAPANSFVGTPTYWMAPEVILAMDEGQYDGKVDVWS  
 LGITCIELAERKPPFLNMMNAMSALYHIAQNE SPVLQSGHWSEYFRNFVDSCLQKIPQDRPTSEVLLKHRF  
 VLRERPPVTIMDLIQRTKDAVRELDNLQYRKMKKILFQEAPNGPGAEAPEEEEEAEPEYMHRAAGTLTSL  
 SHSVPSMSISASSQSSSVNSLADASDNEEEEEEEEEEEEEEGPEAREMAMMQEGETVTSHSSIIHRLP  
 GSDNLYDDPYQPEITPSPLQPPAAPAPTSTSSARRRAYCRNRDHFATIRTASLVSRQIQEHEQDSALRE  
 QLSGYKMRQRQKQLLALSRLRGEREEHSARLQRELEAQRAGFGAEAEKLARRHQAIGEKARAAQAE  
 ERKFQQHILGQQKELAALEAQRTYKLRKEQLKEELQENPSTPKREAEWLLRQEKQLQQCAEEEGAG  
 LLRRQRQYFELQCRQYKRMMLLARHSLDQDLLREDLNKKQTQKDLKALLLRQHEATRELELRQLQAVQR  
 TRAELTRLQHQTTELGNQLEYNKRREQLRQKHAQVRRQPKSLKSKELQIKKQFQETCKIQTRQYKALRA  
 HLLLETPKAQHKSLKRLKEEQTRKLAILEAQYDQSISEMLSSQALRLDETEAEFQALRQLQLELELL  
 NAYQSKIKIRTESQHERELRELEQRVALRRALLEQRVEEELLALQTGRSERIRSLLEQAREIEAFDAES  
 MRLGFSMALGGIPAEAAAQGYPAWPPAWPSRPVPRSGAHWSHGPPPPGMPPPAWRQPSLLAPPAPPN  
 WLGPPTQSGTPRGALLLLRNSPQLRRAASGGSGSENVGPPAAAVPGPLSRSTSVASHILNGSSHFYS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6166\\_d12.zip](https://cdn.origene.com/chromatograms/mk6166_d12.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_004783

**ORF Size:** 3147 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\\_004783.4](#)

**RefSeq Size:** 4625 bp

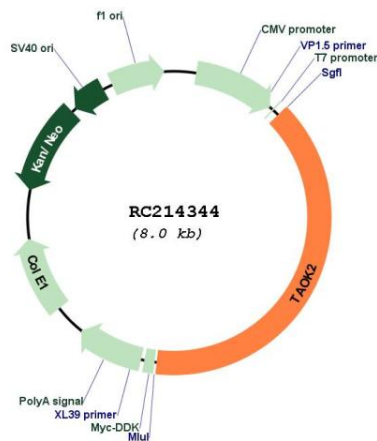
**RefSeq ORF:** 3150 bp

**Locus ID:** 9344

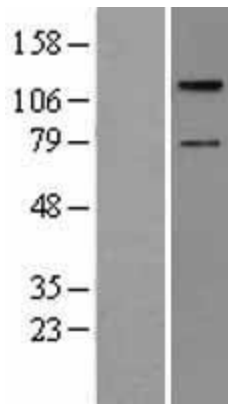
**UniProt ID:** [Q9UL54](#)

**Cytogenetics:** 16p11.2  
**Domains:** pkinase, TyrKc, S\_TKc  
**Protein Families:** Druggable Genome, Protein Kinase, Transmembrane  
**Protein Pathways:** MAPK signaling pathway  
**MW:** 119.1 kDa  
**Gene Summary:** This gene encodes a serine/threonine protein kinase that is involved in many different processes, including, cell signaling, microtubule organization and stability, and apoptosis. Alternatively spliced transcript variants encoding different isoforms have been described for this gene. [provided by RefSeq, Oct 2011]

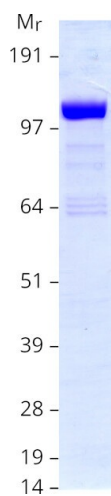
### Product images:



Circular map for RC214344



Western blot validation of overexpression lysate (Cat# [LY401503]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214344 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TAOK2 protein (Cat# [TP314344]). The protein was produced from HEK293T cells transfected with TAOK2 cDNA clone (Cat# RC214344) using MegaTran 2.0 (Cat# [TT210002]).