

## Product datasheet for **MG221426**

### Taf4 (NM\_001081092) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Taf4 (NM_001081092) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Taf4
Synonyms:	135kDa; AI450312; Taf2c1; Taf4a; TAFII130; TAFII135
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG221426 representing NM_001081092, <b>codon optimized</b> . <b>Due to the complexity of NM_001081092, the ORF clone is codon optimized for mammalian Expression.</b> <b>The nucleotide sequence differs from the reference sequence, yet the amino acid sequence remains identical.</b>

Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGGCTGCGGGATCCGACCTCTTGGATGAGGTCTTTTTAACAGCGAGGTGGACGAGAAGTTGTCAGTG  
ATCTGGTGGGATCCCTTGAAAGTCAGCTGGCTGCGTCCGCCGCCACCATCATCACTTGGCTCCCAGAAC  
ACCGGAGCTGAGGGTGCAGCTGCCGGAGCGCTCGGCAACCACGTCGTATCCGGCTCCCCTGCTGGCGCT  
GCCGGCGCCGACCAGCAGCGTCCGCTGAAGGCGCCCCTGCCGCCCCCCTGAGCCACCTCCAGCTGGGA  
GGGCTAGACCAGCTGGAGGAGGTCCACGGCGCCGGATCCAGCTCTCCGAGAAGACTCCTGGTGCCTGC  
AGGGCCAGCCCCTGCTCCAGCGAACTGCGCCACTGCCCGAGGCTAGCGCCGACCCCTGCCCTGCCCGC  
GCCCGCCAGCCGAGCTACCGCTGCAGCCGTTGCTGGACCAGACCCGGTGCAGCCGCTCCACCTGCCG  
GTCCAGGCGGTCTAAGCCCGCCCCCGGGCCGCCCGGGAGCCGACAACCCCTAACGGTTC  
CGCGGCTCCACCTACCGCCCTCATGCAGCTCCCGCTGTTAGCCCTGTGAACAATGGCCAGCTCCTCCT  
CCAGCTGCAGGGAGCGTGATCCAAGCTGCTCCCGCCCAGCGGCCCTAGTCCCCCGCAGCCCCGGCTC  
CTGCCGCCCTCCACCACCTGCCCCACCTGCGCCGTTGGCCCCGCTAGACCACCTGGACATCCTGCTGC  
CCCTGCCCGCCCGTGTACCTGCGGCTGCAGCTGCCGCTGCTGCCGCCGCCGAGCCGCTCAGAACGGA  
GCCGCTCCCGCTCCCGTGCAGCAAGCGGGGAGCCGAGGCTGGGTCAACCCGGCGCCGGCGCGCAAG  
GGGCAAGGCTGAAGCGCAAAGCCAGGACCCGGTCTGGCCAGGTCTGCCGCCGGCTGCCCGCCG  
CGGGTGGCTGGAGGCGGTGCAGCAGGATCCGTGCTGCTCGGACCAGCCATGCCTGGGGCCCTGCCTGG  
CCTGCCAGGGACCCGCAGGCTCGCAAAGGGCGCCGCCGACGACAACCTTACTGCCGCGCACCC



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CAGCCGCTACAACCGGGCAATCCGAGCGACTTTACACCAACAGTGTGGCCCCAGGTTGCCTCAGCC  
 ACCGCAGAATCCCCTAACATCCAGAATTCCAGCTTCCGCCCGGCATGGTGTGGTACGGAGCGAAAAAT  
 GGCCAGCTTCTCATGATCCCACAACAGGCGTTGGCACAGATGCAGGCTCATGCCAGGCGCAACACAGT  
 CTACCATGGCTCCAGACCTGCCACACCGACAGGCGCACCACCCGTTCAAATAAGCACTGTGCAGGCTCC  
 CGGGACCCCATCATCGCCCGACAGGTGACTCCCACTACAATTATAAAGCAGGTGCACAAGCACAGACG  
 ACAGTTCAACCCACCACCACTCTGCAGCGGAGCCAGGTGTTCAACCACAGCTGGTGTCTCGGAGGTAGCC  
 CTCAGCCGCATCCTTGGGAACAGCTACCGCTGTTTCAGACGGGCACCCCAACAACGAAGTGTCTCGGAGG  
 CTCCACGACTTCCACCGCTGCAACCGAGACAATGGAGAAGCTTAAGAAGTGAAGAGCTTTTTGTCTACG  
 TTGATCAAACCTGGCGAGTTCGGGAAAGCAGAGCACAGAACTGCCGCTAATGTCAAGGACCTGGTGCAGA  
 ATCTGCTGGACGGCAAGATTGAGGCCGAGGACTTTACTTCTAGGCTGTACCGAGAGCTGAACTCCAGCCC  
 TCAGCCATATCTGTCCCTTTTCTCAAGAGAAGCCTGCCAGCCCTCCGACAGCTTACCCAGATAGCGCA  
 GCCTTTATCCAGCAGAGCCAGCAACAACAGCCACCAGCCTCACAGGCCACAACCGCACTCACCGCCGTTG  
 TGCTGTCTAGTTCGTACAGAGAACAGCAGGAAAGACGGCAGCATCTGTTACATCTGCCCTTCAGCCCC  
 CGTTATTAGCCTTACGCAGCCACCAGGTGGGCGTTGGAAAGCAAGCCCCCAACTCCGCTGGTGATC  
 CAGCAGCCACAAAGCCTGGTGCCTCATTGACCCCCACAAGTACCCTGACCCAGACCCCTATGGTGG  
 CCTGCGACAGCCCATAACAGGATCATGTTGACAACCCCCAGCAAATCCAGCTGAATCAGCTCCAGCC  
 TGTACCTGTGGTGAACCTACGGTGTGCCTGGGACCAAGGCTCTGTCAACAGTGTCCGCTCAAGCTGCA  
 GCAGCCCAGAAAAAACTGAAGGAACAGGGGGTGGGAGTTTTAGAGATGACGACGATATAAACGACG  
 TCGCTTCCATGGCCGGCGTCAACCTGTCTGAGGAATCCGCAAGGATTCTCGCCACCAACAGCGAGCTGGT  
 GGGTACTCTGACTCGCTCTTGAAGAATGATACATTTCTGCTGCCTGCCCTCTGCAGCGGAGAATTTG  
 GAGATTGGGAAGAAGCATGGAATAACAGAGCTGCACCCCGATGTTGTGAGTTATGTCTCCACGCTACAC  
 AACAGCGCCTGCAGAACCTTGTGAAAAGATTTCTGAGACAGCTCAGCAGAAGAAGTGTAGTTACAAGGA  
 TGATGACCGATATGAGCAAGCTAGTGATGTGAGGGCCAGCTGAAATTTCTCGAGCAGTTCAGCCGATT  
 GAAAAACAGCGCAAGGACGAGCAGGAGAGAGAAATTTCTCATGCGGGCAGCAAAAAGTTCGACGGCAGG  
 AGGATCTGAACAGCTTCGACTGAAACAAAAAGCAAGGAAATGCAGCAACAGGAACTGGCACAGATGCG  
 ACAGAGAGATGCGAACCTGACTGCACTGGCAGCAATCGGCCCTAGGAAGAAGCGAAAAAGTGGACTGCACA  
 GGACCTGGGTGAGGAGCCGAAGGAGTGGACCCGGCGCCGCTGTGCCAGGGGGCTCTGGAGTGGAAACCC  
 CCAGACAGTTCCTAGGCAGAGAATTACCCGGGTGAATCTCCGAGACTTGATTTTTGCTTGAGAAACGA  
 GAGAGAAACCAGCCACAGTTTGTGTTGTATAAAGCCTTTCTGAAA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>MG221426 representing NM\_001081092  
 Red=Cloning site Green=Tags(s)

MAAGSDLLDEVFFNSEVDEKVVSDLVGSLESQLAASAAHHHHLAPRTPELRAAAGALGNHVVSVPAGP  
 AGAGPAASAEGAPAAPEPPPAGRARPAGGGPRRPGSSSPRRLLVPAGPAPAPAKLRPLPEASAGPCPAA  
 AAAAAATAAAVAGPDPAAAAPPAGPGASKPGPPGPPGAAQTLNGSAAPPTAPHAAPAVSPVNNGPAPP  
 PAAGSVIQAAPAPAAPSPPAAPAPAAPPAPPAPVAPARPPGHPAAPAPPVSPAAAAAAAAAAAAAQNG  
 AAPAPAAAASGGAAGLGGPGAGAQAQKAEAPKPGPGPGPAAAAAAAGVAGGGAAGSVLLGPAMPGALPG  
 PAPGTPAGLAKGAAAATPSLPRTPAATTGAIRATLTPTVLAAPRLPQPPQNPNTNIQNFQLPPGMVLRSEN  
 GQLLMIPQALAQMQAHAQAQPPQSTMAPRPTPTGAPPVQISTVQAPGTPIIARQVPTTTIHKQVSQAQT  
 TVQPTTTLQRSPGVQPQLVLLGSAQPASLGTATAVQTGTPQRTVPGASTTSTAATETMENVKKCSFLST  
 LIKLASSGKQSTETAANVKDLVQNLDDGKIEAEDFTSRLYRELNSSPQPYLVPFLKRSLPALRQLTPDSA  
 AFIQSSQQQPPASQATTALTAVVLSVVQRTAGKTAASVTSALQPPVISLTQPTQVGVGKQAPPTPLVI  
 QQPPKPGALIRPPQVTLTQTPMVALRQPHNRIMLTPQIQLNQLQPVVVKPTVLPGTKALSTVSAQAA  
 AAQKNKLEKPGGGSFRDDDDINDVASMAGVNLSEESARILATNSELVGTLTRSCKDDTFLPLPAPLQRRIL  
 ETGKKHGITELHPDVVSYVSHATQQRQLQNLVEKISETAQKQNFYKDDDRYEQASDVRAQLKFFEQLDQI  
 EKQRKDEQEREILMRAAKSRSRQEDPEQLRLKQKAKEMQQQELAQMRQRDANLTAALAAIGPRKRRKVDCT  
 GPGSGAEGSGPAAVPGGSGVGTPRQFTRQRITRVNLRDLIFCLENERETSHSLLLYKAFK

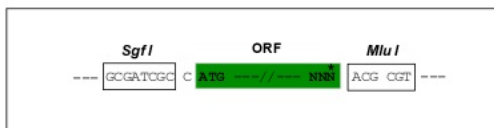
TRTRPLE – GFP Tag – V

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja1931\\_a02.zip](https://cdn.origene.com/chromatograms/ja1931_a02.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



```

                                Kozac
                                Consensus
                                Sgf I   Asc I
                                -----
EcoR I   BamH I Kpn I   RBS
CTATAGGCGCGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCCGCCGATCGCCGGCGCCAGATCT

Hind III  Nhe I  Rsr II  Mlu I   Not I   Xho I   GFP Tag
CAAGCTTAAGTACTAGTAGCGGACCG  ACG CGT  ACG CGG  CCG CTC GAG  ATG GAG AGC GAC -----
                                     T  R  T  R  P  L  E  M  E  S  D  -  -  -

                                Pme I   Fse I
                                -----
---  ---  GAA  GAA  AGA  GTT  TAA  ACGGCCGGCCGCGGAGCT
- - -  E  E  R  V  Stop
    
```

**ACCN:** NM\_001081092

**ORF Size:** 3126 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\\_001081092.1](#), [NP\\_001074561.1](#)

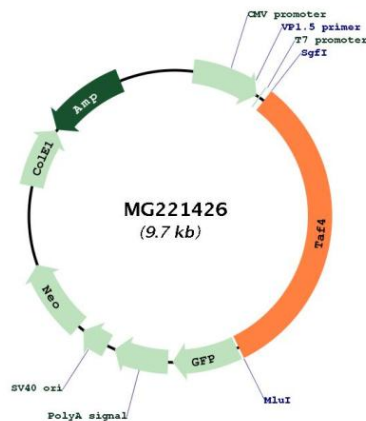
**RefSeq Size:** 4422 bp

**RefSeq ORF:** 3129 bp

**Locus ID:** 228980

**Cytogenetics:** 2 H4

**Product images:**



Circular map for MG221426