

Product datasheet for **RG223691**

TAF4 (NM_003185) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: TAF4 (NM_003185) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: TAF4
Synonyms: TAF(II)130; TAF(II)135; TAF2C; TAF2C1; TAF4A; TAFII-130; TAFII-135; TAFII130; TAFII135
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG223691 representing NM_003185
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCGCGGGCTCGGATCTGCTGGACGAGGTCTTCTTCAACAGCGAGGTGGACGAGAAAGTGGTGAAGC
 ACCTGGTGGGCTCGTGGAGTCGCAGCTGGCGGCCAGCGCGGCCACCACCACCTCGCGCCGCGCAC
 GCCCGAGGTGCGGGCCGCGGCCCGCGCGCTCGGGAACCATGTTGTGAGCGGCAGCCCGCGGAGCC
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 CCGCACTGTATCCAGACGCCCCCTTCGTGGCGCGCGCGCCCCCGCGCCCGCGCGCCCTCGCC
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 CCAACCTCACAGCACTAGCAGCGATCGGGCCAGGAAAAGAGGAAAGTGACTGTCCGGGCGGGGCTC
 AGGAGCAGAGGGGTCCGGCCCCGCTCAGTGGTCCCAGGACAGCTCGGGTGTCCGGAACCCAGACAGCTT
 ACGCGACAAGAATCACGCGGTCAACCTCAGGGACCTCATATTTTGTAGAAAATGAACGTGAGACAA
 GCCATTACTGCTGCTCTACAAAGCATTCTTAAG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG223691 representing NM_003185

Red=Cloning site Green=Tags(s)

MAAGSDLLDEFFNSEVDEKVVSDLVGSLESQLAASAAHHHHLAPRTPEVRAAAAGALGNHVVSOSPAGA
 AGAGPAAPAEAGPAEPEPPAGRARPGGGPQRPGPSRRPLVPAGPAPPAKLRPPPEGSAGSCAPV
 PAAAAVAAGPEPAPAGPAKPAAGPAAALAAAGPGPGPGPGPGPKPAGPAAQTLNGSALLNSHHA
 AAPAVSLVNGPAALLPLPKPAAPGTVIQTTPFVGAAPPAPAAPSPPAAPAPAAAAPPPPPAPATL
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 QNLVEKISETAQQKNFSYKDDDRYEQASDVRAQLKFFEQLDQIEKQRKDEQEREILMRAAKSRSRQEDPE
 QLRLKQKAKEMQQELAQMQRDANLTLAAIGPRKRRKVDPCPGPGSAGEGSGPVSVPVSSGVTGRPQF
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TRTRPLE – GFP Tag – V

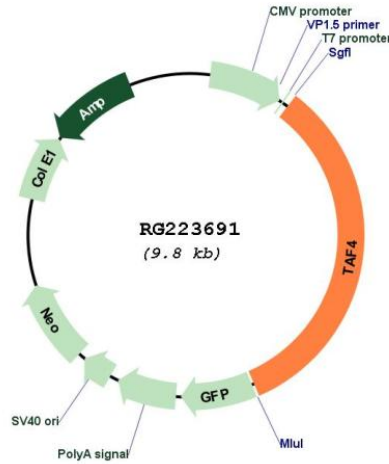
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_003185

ORF Size: 3255 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:	<ol style="list-style-type: none">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_003185.3 , NP_003176.2
RefSeq Size:	4647 bp
RefSeq ORF:	3258 bp
Locus ID:	6874
UniProt ID:	O00268
Cytogenetics:	20q13.33
Protein Pathways:	Basal transcription factors, Huntington's disease
Gene Summary:	Initiation of transcription by RNA polymerase II requires the activities of more than 70 polypeptides. The protein that coordinates these activities is transcription factor IID (TFIID), which binds to the core promoter to position the polymerase properly, serves as the scaffold for assembly of the remainder of the transcription complex, and acts as a channel for regulatory signals. TFIID is composed of the TATA-binding protein (TBP) and a group of evolutionarily conserved proteins known as TBP-associated factors or TAFs. TAFs may participate in basal transcription, serve as coactivators, function in promoter recognition or modify general transcription factors (GTFs) to facilitate complex assembly and transcription initiation. This gene encodes one of the larger subunits of TFIID that has been shown to potentiate transcriptional activation by retinoic acid, thyroid hormone and vitamin D3 receptors. In addition, this subunit interacts with the transcription factor CREB, which has a glutamine-rich activation domain, and binds to other proteins containing glutamine-rich regions. Aberrant binding to this subunit by proteins with expanded polyglutamine regions has been suggested as one of the pathogenetic mechanisms underlying a group of neurodegenerative disorders referred to as polyglutamine diseases. [provided by RefSeq, Jul 2008]