

Product datasheet for **RG202555**

GTF2H4 (NM_001517) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GTF2H4 (NM_001517) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GTF2H4
Synonyms:	P52; TFB2; TFIIH
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG202555 representing NM_001517
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAGAGACCCCTTCAAGGGGACTGAACCGAGTACACCTACAATGCAGGAATCTGCAGGAATCTTAG
 GGGCCTGAGCCCTGGGGTATTGACCGATTGTATGGGCACCCTGCCACATGTCTGGCTGTCTCAGGGA
 GCTCCCATCCTTGCTAAGAAGGAAATTCAGCAAGGCTCAGGAGGAAAGTACAGGGCTGCTGAGCGGCCTCC
 GTAGCTCTGTGGGTAAGAAGGAATTCAGCAAGGCTCAGGAGGAAAGTACAGGGCTGCTGAGCGGCCTCC
 GGATCTGGCACACAGCTGCTCCAGGCGGGCTCCAGGGCTCATCCTCAACCCATTTCCGCCAGAA
 CCTCCGATTGCCCTTCTGGGTGGGGGAAGGCCTGGTCTGATGACACAAGTCACTGGGACCAGACAAG
 CATGCCCGGACGTTCCCTCCCTTGACAAGTACGCCGAGGAGCGATGGGAGGTGGTCTTGCACTTCATGG
 TGGGCTCCCCAGTGCAGCTGTAGCCAGGACTGGCTCAGCTCCTCAGCCAGGCTGGGCTCATGAAGAG
 TACTGAACCTGGAGAGCCGCCCTGCATTACTTCCGCTGGCTTCCAGTTCTGTTGCTGGACACCCCGCT
 CAGCTCTGGTACTTTATGTTGCAGTATTTGCAGACAGCCAGAGCCGGGGCATGGACCTGGTAGAGATTC
 TCTCCTTCTTCCAGCTCAGCTTCTCTACTCTGGGCAAGGATTACTCTGTGGAAGGTATGAGTATTC
 TCTGTTGAACTTCTGCAACATCTGCGTGAGTTTGGGCTTGTTCAGAGGAAGAGGAAATCTCGGCGT
 TACTACCCACACGCCTGGCCATCAATCTCTCATCAGGTGTCTTGGAGCTGGGGCACTGTGCATCAGC
 CAGGTTTCATTGTGCGTGGAAACCAATTACCGACTGTATGCCTACACGGAGTCGGAGCTGCAGATTGCCCT
 CATTGCCCTCTTCTGAGATGCTCTATCGGTTCCCAACATGGTGGTGGCGCAGGTGACCCGGGAGAGT
 GTGCAGCAGGCAATCGCCAGTGGCATCACAGCCAGCAGATAATCCATTTCTAAGGACAAGAGCCACC
 CAGTGATGCTCAAACAGACACCTGTGCTGCCCCACCATCACCAGCAGATCCGGCTCTGGGAGCTGGA
 AAGGGACAGACTCCGGTTCACTGAGGGTGCCTGTATAACCAGTTCCTGTGCAAGTGGACTTTGAGCTG
 CTGCTGGCCACGCGGGAGCTGGGCGTGTCTGTTGAGAAGTCCGGCAAGCGGCTCATGGTGGTGA
 CCCCAGCCGGGCACAGCGACGTCAGCGCTTTTGAAGCGGCAGAAACATAGCTCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG202555 representing NM_001517
 Red=Cloning site Green=Tags(s)

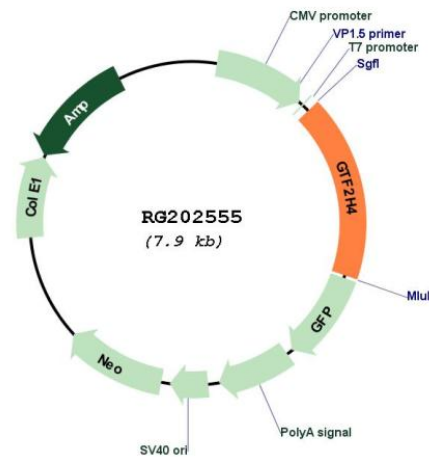
MESTPSRGLNRVHLQCRNLQEFLGGLSPGVLDRLYGHPTCLAVFRELPKSLAKNWMRMLFLEQPLPQAA
 VALWVKKEFSKAQEESTGLLSGLRIWHTQLLPGGQLILNPIFRQNLRIALLGGKAWSDDTSQLGPKD
 HARDVPSLDKYAEERWEVVLHFMVGSPPSAAVSQDLAQLLSQAGLMKSTEPGEPPCITSAGFQFLLDTPA
 QLWYFMLQYLQTAQSRGMDLVEILSFLFQLSFSTLTKDYSVEGMSDLSLNLQHLREFGLVFQRKRKSR
 RYYPTRLAINLSSGVSGAGGTVHQPGFIVVETNYRLYAYTESELQIALIALFSEMLYRFPNMVVAQVTRES
 VQQAIASGITAQQIIHFLRTRAHPVMLKQTPVLPPTITDQIRLWELERDRLRFTGVLVYQFLSQVDFEL
 LLAHARELGVLVFENSAKRLMVVTPAGHSDVKRFWKRQKHSS

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Plasmid Map:


ACCN: NM_001517

ORF Size: 1386 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_001517.5
RefSeq Size:	1736 bp
RefSeq ORF:	1389 bp
Locus ID:	2968
UniProt ID:	Q92759
Cytogenetics:	6p21.33
Domains:	Tfb2
Protein Families:	Druggable Genome, Transcription Factors
Protein Pathways:	Basal transcription factors, Nucleotide excision repair
Gene Summary:	Component of the general transcription and DNA repair factor IIF (TFIIF) core complex, which is involved in general and transcription-coupled nucleotide excision repair (NER) of damaged DNA and, when complexed to CAK, in RNA transcription by RNA polymerase II. In NER, TFIIF acts by opening DNA around the lesion to allow the excision of the damaged oligonucleotide and its replacement by a new DNA fragment. In transcription, TFIIF has an essential role in transcription initiation. When the pre-initiation complex (PIC) has been established, TFIIF is required for promoter opening and promoter escape. Phosphorylation of the C-terminal tail (CTD) of the largest subunit of RNA polymerase II by the kinase module CAK controls the initiation of transcription.[UniProtKB/Swiss-Prot Function]