

Product datasheet for **RG221666**

TGIF (TGIF1) (NM_170695) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: TGIF (TGIF1) (NM_170695) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: TGIF
Synonyms: HPE4; TGIF
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG221666 representing NM_170695
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGTTCTAGCGCAGAGCCGGGTGTCTGCCGGGTGGGCTCCCCGATTGTTCCGGCTCCGGCGGGGGCG
 GCTCTGATTCTTTCCATGGCCCGCTCCACCCCGGAATCCCCAGTGCCTTTCCACGGCTTTTCT
 GGCGTCCCCCGACTCTCCGCGGCACTTTGGCTACCTCCCCAGCGCGTGGTCTCCCTGGCGACC
 CCCTCTGCGCTCCTGGGTCTCCTCGCCCCCTCCTCCACCGCGCGCTGCCACAGCCGCTGCC
 TCTCCCCGGAGCTGGGGACCAAGGCTGGGCCCGCGCGCATCGGTGGAACTCCGCGGTCCCATC
 CCAGGGCGCACAGGGTCCAGTCTCCTCGGCGCCGACTCCTGGAAACAATGAAAGGTATTGTTGCAGCATCT
 GGCAGTGAGACTGAGGATGAGGACAGCATGGACATTCCTTGGACCTTTCTTATCCGCTGGCTCAGGCA
 AGAGAAGGAGAAGGGGAACCTACCCAAGGAGTCTGTGCAGATTCTCGGGATTGGCTGTATGAGCACCG
 TTACAATGCCTATCCTTCAGAGCAAGAAAAAGCGTTGCTGTCCCAGCAAACACACCTGTCTACGCTACAG
 GTCTGTAAGTGGTTCATCAACGCCCGCCGAGGCTCCTCCCTGACATGCTGAGAAAGGATGGCAAAGATC
 CAAATCAGTTCACAATTTCCGCGTGGGGCAAGATTCTGAAACGAGCTCTGTGGAGTCCGTGATGGG
 CATCAAAACTTCATGCCAGCTCTAGAGGAGACCCCATTCATTCTGTACAGCTGGGCCAAACCAACC
 CTAGGGAGGCCACTGTCTCCTAAGCCGTATCCCCGGGATCAGTTTGGCTCGTCCATCAGTGTCTGCC
 ATACCACTGTGACTGCATTGAAAGATGTCCCTTCTCTCTGCCAGTCCGGTGGGACAAAACAC
 AGATATACAGCAGATAGCGGCCAAAAAATTACAGACACCTCTCTCATGTACCCAGAGGACACTGTAA
 TCTGGACCAAGTACGAATACACAGAGTGGTCTTTTCAACACTCCTCCCCACTCCACCGGACCTCAACC
 AGGACTTCAGTGGATTTTCAGTTCTAGTGGATGTTGCACTCAAACGGGCTGCAGAGATGGAGCTTCAGGC
 AAAACTTACAGCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG221666 representing NM_170695
 Red=Cloning site Green=Tags(s)

MVLAQSRVSAGVGSPhCSGSGGGGSDSFPWPASHPGNPQCSFSTAFASPRLSRGTLAYLPPAPWSSLAT
 PSALLGSSCAPP PPPARCPQPRAL SPELGTKAGPRRPHRWELPRSPSQGAQGPAPRRRLETMKGI VAAS
 GSETEDEDSMDIPLDLSSSAGSGKRRRRGNL PKESVQILRDWL YEHRYNAYPSEQEKALLSQQTHLSTLQ
 VCNWF INARRRLLPDMLRKDGKDPNQFTISRRAK ISETSSVESVMGIKNFMPALEETPFHSC TAGPNPT
 LGRPLSPKPSPGSVLARPSVICHHTT VTALKDVPFSLCQSVGVGQNTDIQQIAAKNFDTDSLMPEDTCK
 SGPSTNTQSGLFNTPPPTPPDLNQDFSGFQLLV DVALKRAAEMELQAKLTA

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_170695

ORF Size: 1203 bp

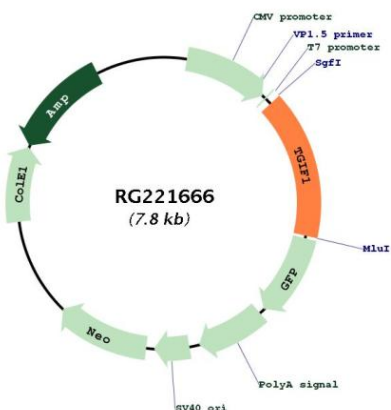
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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 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:	<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:	<u>NM_170695.4</u>
RefSeq Size:	2076 bp
RefSeq ORF:	759 bp
Locus ID:	7050
UniProt ID:	<u>Q15583</u>
Cytogenetics:	18p11.31
Domains:	homeobox
Protein Families:	Druggable Genome, Stem cell - Pluripotency, Stem cell relevant signaling - TGFb/BMP signaling pathway, Transcription Factors
Gene Summary:	The protein encoded by this gene is a member of the three-amino acid loop extension (TALE) superclass of atypical homeodomains. TALE homeobox proteins are highly conserved transcription regulators. This particular homeodomain binds to a previously characterized retinoid X receptor responsive element from the cellular retinol-binding protein II promoter. In addition to its role in inhibiting 9-cis-retinoic acid-dependent RXR alpha transcription activation of the retinoic acid responsive element, the protein is an active transcriptional co-repressor of SMAD2 and may participate in the transmission of nuclear signals during development and in the adult. Mutations in this gene are associated with holoprosencephaly type 4, which is a structural anomaly of the brain. Alternative splicing has been observed at this locus and multiple splice variants encoding distinct isoforms are described. [provided by RefSeq, Jul 2013]

Product images:



Circular map for RG221666