

Product datasheet for SC311264

TGIF (TGIF1) (NM_170695) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: TGIF (TGIF1) (NM_170695) Human Untagged Clone

Tag: Tag Free Symbol: TGIF

Synonyms: HPE4; TGIF

Mammalian Cell Neomycin

Selection:

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

Fully Sequenced ORF: >SC311264 representing NM_170695.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGGTTCTAGCGCAGAGCCGGGTGTCTGCCGGGGTGGGCTCCCCGCATTGTTCGGGCTCCGGCGGGGGCC GGCTCTGATTCCTTTCCATGGCCCGCCTCCCACCCCGGGAATCCCCAGTGCTCCTTTTCCACGGCTTTT CTGGCGTCCCCCGACTCTCCCGCGGCACTTTGGCCTACCTTCCCCCAGCGCCGTGGTCCTCCCTGGCG GCCCTCTCCCGGAGCTGGGGACCAAGGCTGGGCCCGCCGCCGCCGCATCGGTGGGAACTTCCGCGGTCC CCATCCCAGGGCGCACAGGGTCCAGCTCCTCGGCGCCGACTCCTGGAAACAATGAAAGGTATTGTTGCA GCATCTGGCAGTGAGACTGAGGATGAGGACAGCATGGACATTCCCTTGGACCTTTCTTCATCCGCTGGC TCAGGCAAGAGAAGGAGAAGGGGCAACCTACCCAAGGAGTCTGTGCAGATTCTTCGGGATTGGCTGTAT GAGCACCGTTACAATGCCTATCCTTCAGAGCAAGAAAAAGCGTTGCTGTCCCAGCAAACACACCTGTCT ACGCTACAGGTCTGTAACTGGTTCATCAACGCCCGCCGCAGGCTCCTCCCTGACATGCTGAGAAAGGAT GGCAAAGATCCAAATCAGTTCACAATTTCCCGCCGTGGGGCCAAGATTTCTGAAACGAGCTCTGTGGAG TCCGTGATGGGCATCAAAAACTTCATGCCAGCTCTAGAGGAGACCCCATTTCATTCCTGTACAGCTGGG CCAAACCCAACCCTAGGGAGGCCACTGTCTCCTAAGCCGTCATCCCCGGGATCAGTTTTGGCTCGTCCA GTGGGACAAAACACAGATATACAGCAGATAGCGGCCAAAAACTTCACAGACACCTCTCTCATGTACCCA GAGGACACTTGTAAATCTGGACCAAGTACGAATACACAGAGTGGTCTTTTCAACACTCCTCCCCCTACT CCACCGGACCTCAACCAGGACTTCAGTGGATTTCAGCTTCTAGTGGATGTTGCACTCAAACGGGCTGCA

GAGATGGAGCTTCAGGCAAAACTTACAGCT<mark>TAA</mark>

ACGCGTACGCGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT

TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: Sgfl-Mlul



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TGIF (TGIF1) (NM_170695) Human Untagged Clone - SC311264

ACCN: NM_170695

Insert Size: 1206 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 customercom 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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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: <u>NM 170695.3</u>

 RefSeq Size:
 2264 bp

 RefSeq ORF:
 1206 bp

 Locus ID:
 7050

 UniProt ID:
 Q15583

 Cytogenetics:
 18p11.31

Domains: homeobox

Protein Families: Druggable Genome, Stem cell - Pluripotency, Stem cell relevant signaling - TGFb/BMP

signaling pathway, Transcription Factors

MW: 43 kDa



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 corepressor 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]

Transcript Variant: This variant (1) is the longest transcript and encodes the longest isoform (a). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.