

Product datasheet for SC111038

TGIF (TGIF1) (NM 003244) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: TGIF (TGIF1) (NM_003244) Human Untagged Clone

Tag: Tag Free
Symbol: TGIF

Synonyms: HPE4; TGIF

Mammalian Cell None

Selection:

Vector: pCMV6-XL5

E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >NCBI ORF sequence for NM_003244, the custom clone sequence may differ by one or more

nucleotides

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5' Read Nucleotide Sequence: >OriGene 5' read for NM_003244 unedited

AGGTTCACATTTGTATACGACTCCTATAGGCGGCNCGCGATTCGGCACGAGGCCACCGCC GGGCGAGGGATGCGGGCGGTCCGTGCGCGGCAGGCGGAAAGGATCGTGTTTCTGGACCCG GGTCCAGTCTTCCCGGCTGGAAGGTATTGTTGCAGCATCTGGCAGTGAGACTGAGGATGA GGACAGCATGGACATTCCCTTGGACCTTTCTTCATCCGCTGGCTCAGGCAAGAGAAGGAG AAGGGGCAACCTACCCAAGGAGTCTGTGCAGATTCTTCGGGATTGGCTGTATGAGCACCG TTACAATGCCTATCCTTCAGAGCAAGAAAAAGCGTTGCTGTCCCAGCAAACACACCTGTC TACGCTACAGGTCTGTAACTGGTTCATCAACGCCCGCCGCAGGCTCCTCCCTGACATGCT GAGAAAGGATGGCAAAGATCCAAATCAGTTCACAATTTCCCGCCGTGGGGCCAAGATTTC TGAAACGAGCTCTGTGGAGTCCGTGATGGGCATCAAAAACTTCATGCCAGCTCTAGAGGA GACCCCATTTCATTCCTGTACAGCTGGGCCAAACCCAACCCTAGGGAGGCCACTGTCTCC TAAGCCGTCATCCCCGGGATCAGTTNTGGCTCGTCCATCAGTGATCTGCCATACCACTGT AGATATACAGCAGATAGCGGCCAAAAACTTCACAGACACCTCTCTCATGTACCCAGAGGA CACTTGTAAATCTGGACCAAGTACGAATACACAGAGTGGNTCTTTTCAACACTTCTCCCC CTACTNCACC

Restriction Sites: Notl-Notl
ACCN: NM_003244
Insert Size: 2660 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from

the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

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 003244.2, NP 003235.1</u>

RefSeq Size: 1618 bp
RefSeq ORF: 819 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

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 (4) has an alternate 5' terminal exon, which results in a different 5' UTR and 5' coding region, compared to variant 1. The resulting isoform (c) is shorter and has a distinct N-terminus, compared to isoform a. Variants 3, 4 and 10 encode the same isoform c.