

## **Product datasheet for SC334837**

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## TGIF (TGIF1) (NM\_001278686) Human Untagged Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** TGIF (TGIF1) (NM\_001278686) 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: >NCBI ORF sequence for NM\_001278686, the custom clone sequence may differ by one or

more nucleotides

**Restriction Sites:** Sgfl-Mlul

**ACCN:** NM 001278686

**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).





The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube Components:

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: NM 001278686.1, NP 001265615.1

RefSeq Size: 1553 bp RefSeq ORF: 759 bp Locus ID: 7050 **UniProt ID:** Q15583 Cytogenetics: 18p11.31

**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 (11) includes two alternate 5' exons, which result in a different 5' UTR and a downstream translation start codon, compared to variant 1. The resulting isoform (d) has a shorter N-terminus, compared to isoform a. Variants 5, 6, 7, 8, and 11 encode the same isoform d. 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.