

Product datasheet for **RG217799**

TGIF (TGIF1) (NM_173207) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TGIF (TGIF1) (NM_173207) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	TGIF1
Synonyms:	HPE4; TGIF
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG217799 representing NM_173207 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGACTTGCTCGGGCAAAGTTGTGCATTGGCCCGATCAAGCCTGACTTCTAGCCAAGGTATTGTTGCAG
CATCTGGCAGTGAGACTGAGGATGAGGACAGCATGGACATTCCTTGGACCTTTCTTCATCCGCTGGCTC
AGGCAAGAGAAGGAGAAGGGCAACCTACCCAAGGAGTCTGTGCAGATTCTCGGGATTGGCTGTATGAG
CACCGTTACAATGCCTATCCTTCAGAGCAAGAAAAGCGTTGCTGTCCAGCAAACACACCTGTCTACGC
TACAGGCTGTAACTGGTTCATCAACGCCCGCCGAGGCTCCTCCCTGACATGCTGAGAAAGGATGGCAA
AGATCCAAATCAGTTCACAATTTCCCGCGTGGGGCCAAGATTTCTGAAACGAGCTCTGTGGAGTCCGTG
ATGGGCATCAAAAACCTCATGCCAGCTCTAGAGGAGACCCATTTTCATTCTGTACAGCTGGGCCAAACC
CAACCCTAGGGAGGCCACTGTCTCCTAAGCCGTATCCCCGGGATCAGTTTTGGCTCGTCCATCAGTGAT
CTGCCATACCACTGTGACTGCATTGAAAGATGTCCCTTCTCTCTGCCAGTCGGTCCGGTGTGGGACAA
AACACAGATACAGCAGATAGCGGCCAAAACCTCACAGACACCTCTCTCATGTACCCAGAGGACACTT
GTAATCTGGACCAAGTACGAATACACAGAGTGGTCTTTTCAACTCCTCCCCCTACTCCACCGGACCT
CAACCAGGACTTCAGTGGATTTTCAGTCTTAGTGGATGTTGCACTCAAACGGGCTGCAGAGATGGAGCTT
CAGGCAAACTTACAGCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

Protein Sequence: >RG217799 representing NM_173207
Red=Cloning site Green=Tags(s)

MTCSGKSCALARSSLTSSQGIVAASGSETEDEDSMDIPLDLSSSAGSGKRRRRGRLPKESVQILRDWLYE
 HRYNAYPSEQEKALLSQQTHLSTLQVCNWFINARRRLLPDMLRKDGKDPNQFTISRRAKISSETSSVESV
 MGIKNFMPALEETPFHSTAGPNPTLGRPLSPKPSSPGSVLARPSVICHTTVTALKDVPFSLCQSVGVGQ
 NTDIQQIAAKNFDTSLMPEDTCKSGPSTNTQSLFNTPPPTPPDLNQDFSGFQLLVDAVKRAEMEL
 QAKLTA

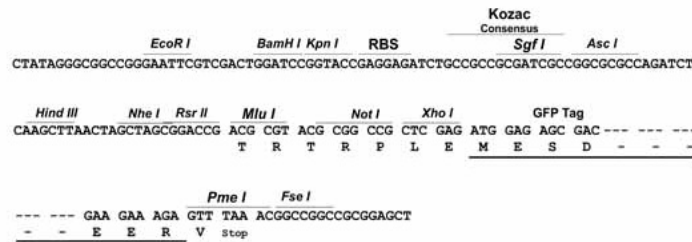
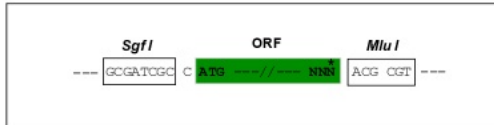
TRTRPLE - GFP Tag - V

Restriction Sites:

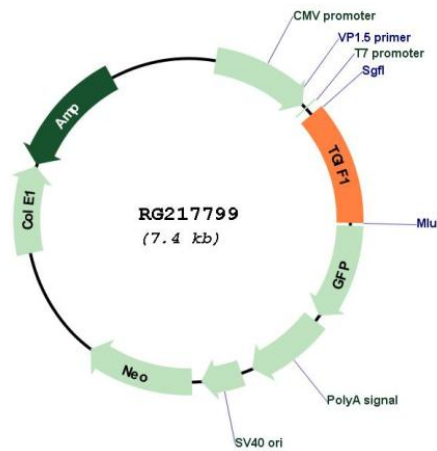
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_173207

ORF Size: 858 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_173207.4
RefSeq Size:	1474 bp
RefSeq ORF:	861 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 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]