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Product datasheet for RC201549

TGIF (TGIF1) (NM_173208) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TGIF (TGIF1) (NM_173208) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TGIF
Synonyms:	HPE4; TGIF
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

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>RC201549 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAAAGGCAAGAAAGGTATTGTTGCAGCATCTGGCAGTGAGACTGAGGATGAGGACAGCATGGACATTC
CCTTGGACCTTTCTTCATCCGCTGGCTCAGGCAAGAGAAGGAGAAGGGGCAACCTACCCAAGGAGTCTGT
GCAGATTCTTCGGGATTGGCTGTATGAGCACCGTTACAATGCCTATCCTTCAGAGCAAGAAAAAGCGTTG
CTGTCCCAGCAAACACACCTGTCTACGCTACAGGTCTGTAACTGGTTCATCAACGCCCGCCGCAGGCTCC
TCCCTGACATGCTGAGAAAGGATGGCAAAGATCCAAATCAGTTCACAATTTCCCGCCGTGGGGCCAAGAT
TTCTGAAACGAGCTCTGTGGAGTCCGTGATGGGCATCAAAAACTTCATGCCAGCTCTAGAGGAGACCCCA
TTTCATTCCTGTACAGCTGGGCCAAACCCAACCCTAGGGAGGCCACTGTCTCCTAAGCCGTCATCCCCGG
GATCAGTTTTGGCTCGTCCATCAGTGATCTGCCATACCACTGTGACTGCATTGAAAGATGTCCCTTTCTC
TCTCTGCCAGTCGGTCGGTGTGGGACAAAACACAGATATACAGCAGATAGCGGCCAAAAACTTCACAGAC
ACCTCTCTCATGTACCCAGAGGACACTTGTAAATCTGGACCAAGTACGAATACACAGAGTGGTCTTTTCA
ACACTCCTCCCCCTACTCCACCGGACCTCAACCAGGACTTCAGTGGATTTCAGCTTCTAGTGGATGTTGC
ACTCAAACGGGCTGCAGAGATGGAGCTTCAGGCAAAACTTACAGCT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA
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Protein Sequence:

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>RC201549 protein sequence
Red=Cloning site Green=Tags(s)

MKGKKGIVAASGSETEDEDSMDIPLDLSSSAGSGKRRRRGNLPKESVQILRDWLYEHRYNAYPSEQEKAL
LSQQTHLSTLQVCNWFINARRRLLPDMLRKDGKDPNQFTISRRGAKISETSSVESVMGIKNFMPALEETP
FHSCTAGPNPTLGRPLSPKPSSPGSVLARPSVICHTTVTALKDVPFSLCQSVGVGQNTDIQQIAAKNFTD
TSLMYPEDTCKSGPSTNTQSGLFNTPPPTPPDLNQDFSGFQLLVDVALKRAAEMELQAKLTA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV
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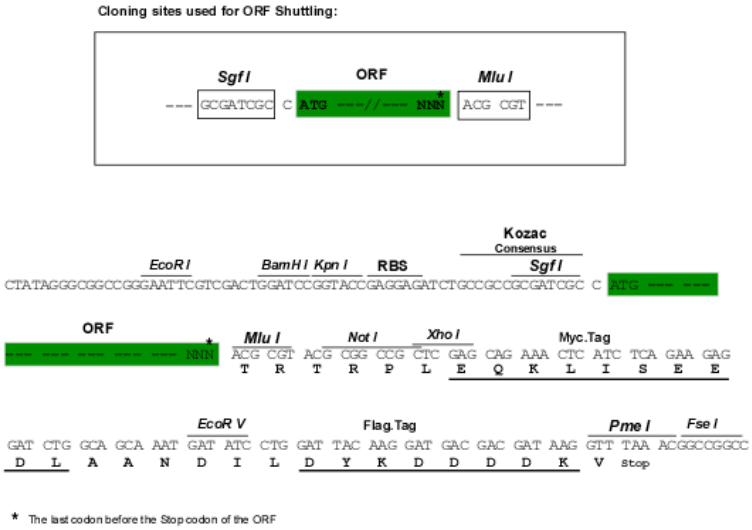
Chromatograms: https://cdn.origene.com/chromatograms/mk6300_g08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_173208

ORF Size: 816 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).

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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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_173208.3
RefSeq Size:	1890 bp
RefSeq ORF:	819 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
MW:	29.7 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 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]

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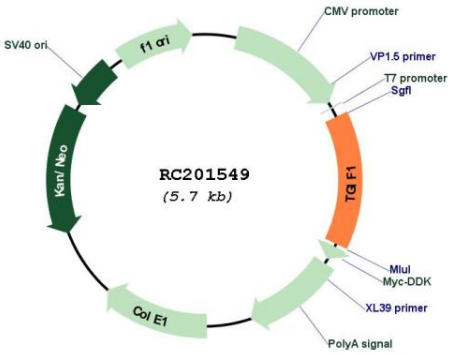
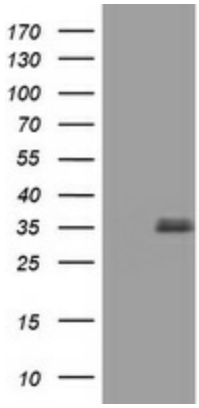
Product images:



Circular map for RC201549



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY TGIF1 (Cat# RC201549, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-TGIF1(Cat# [TA802284]). Positive lysates [LY406653] (100ug) and [LC406653] (20ug) can be purchased separately from OriGene.

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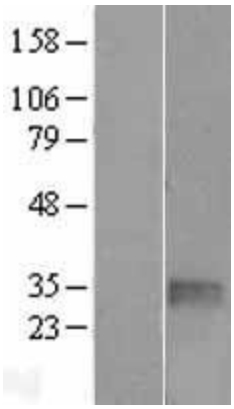
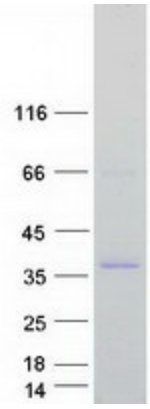


Western blot validation of overexpression lysate (Cat# [LY418813]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC212969] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TGIF1 protein (Cat# [TP301549]). The protein was produced from HEK293T cells transfected with TGIF1 cDNA clone (Cat# RC201549) using MegaTran 2.0 (Cat# [TT210002]).

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