

Product datasheet for RG219450

TCF7 (NM_213648) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: TCF7 (NM_213648) Human Tagged ORF Clone

Tag: TurboGFP

Symbol: TCF7

Synonyms: TCF-1

Mammalian Cell Neomycin

Selection:

Vector: pCMV6-AC-GFP (PS100010)

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

ORF Nucleotide >RG219450 representing NM_213648

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

CGCTGCCCCAGCCCCGTTCCTTCCGATGACAGTGCTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



Protein Sequence: >RG219450 representing NM_213648

Red=Cloning site Green=Tags(s)

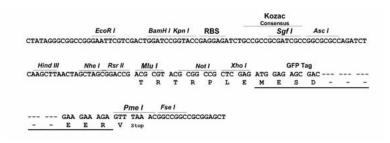
MYKETVYSAFNLLMHYPPPSGAGQHPQPQPPLHKANQPPHGVPQLSLYEHFNSPHPTPAPADISQKQVHR PLQTPDLSGFYSLTSGSMGQLPHTVSWFTHPSLMLGSGVPGHPAAIPHPAIVPPSGKQELQPFDRNLKTQ AESKAEKEAKKPTIKKPLNAFMLYMKEMRAKVIAECTLKESAAINQILGRRWHALSREEQAKYYELARKE RQLHMQLYPGWSARDNYGKKKRRSREKHQESTTGGKRNAFGTYPEKAAAPAPFLPMTVL

Restriction Sites:

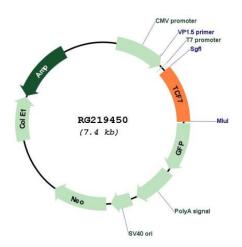
Sgfl-Mlul

Cloning Scheme:





Plasmid Map:



ACCN: NM_213648

ORF Size: 807 bp

TCF7 (NM_213648) Human Tagged ORF Clone - RG219450

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: 1. Centrifuge at 5,000xg for 5min.

5q31.1

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 213648.5</u>

 RefSeq Size:
 3073 bp

 RefSeq ORF:
 810 bp

 Locus ID:
 6932

 UniProt ID:
 P36402

Cytogenetics:

Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Transcription Factors

Protein Pathways: Acute myeloid leukemia, Adherens junction, Arrhythmogenic right ventricular

cardiomyopathy (ARVC), Basal cell carcinoma, Colorectal cancer, Endometrial cancer,

Melanogenesis, Pathways in cancer, Prostate cancer, Thyroid cancer, Wnt signaling pathway

Gene Summary: This gene encodes a member of the T-cell factor/lymphoid enhancer-binding factor family of

high mobility group (HMG) box transcriptional activators. This gene is expressed

predominantly in T-cells and plays a critical role in natural killer cell and innate lymphoid cell

development. The encoded protein forms a complex with beta-catenin and activates transcription through a Wnt/beta-catenin signaling pathway. Mice with a knockout of this gene are viable and fertile, but display a block in T-lymphocyte differentiation. Alternative splicing results in multiple transcript variants. Naturally-occurring isoforms lacking the N-terminal beta-catenin interaction domain may act as dominant negative regulators of Wnt

signaling. [provided by RefSeq, Oct 2016]