OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC219450

TCF7 (NM_213648) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TCF7 (NM_213648) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TCF7
Synonyms:	TCF-1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC219450 representing NM_213648 Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGTACAAAGAGACCGTCTACTCCGCCTTCAATCTGCTCATGCATTACCCACCCCCCTCGGGAGCAGGGC AGCACCCCCAGCCGCAGCCCCCGCTGCACAAGGCCAATCAGCCCCCCCACGGTGTCCCCCAACTCTCTCT CTACGAACATTTCAACAGCCCACATCCCACCCCTGCACCTGCGGACATCAGCCAGAAGCAAGTTCACAGG CCTCTGCAGACCCCTGACCTCTCTGGCTTCTACTCCCTGACCTCAGGCAGCATGGGGCAGCTCCCCCACA CTGTGAGCTGGTTCACCCACCCATCCTTGATGCTAGGTTCTGGTGTACCTGGTCACCCAGCAGCCATCCC CCACCCGGCCATTGTGCCCCCCTCAGGGAAGCAGGAGCTGCAGCCCTTCGACCGCAACCTGAAGACACAA GCAGAGTCCAAGGCAGAGAAGGAGGCCAAGAAGCCAACCATCAAGAAGCCCCTCAATGCCTTCATGCTGT ACATGAAGGAGATGAGAGCCAAGGTCATTGCAGAGTGCACACTTAAGGAGAGCGCTGCCATCAACCAGAT CCTGGGCCGCAGGTGGCACGCGCTGTCGCGAGAAGAGCAGGCCAAGTACTATGAGCTGGCCCGCAAGGAG AGGCAGCTGCACATGCAGCTATACCCAGGCTGGTCAGCGCGGGACAACTACGGGAAGAAGAAGAGGCGGT CGAGGGAAAAGCACCAAGAATCCACCACAGGAGGAAAAAGAAATGCATTCGGTACTTACCCGGAGAAGGC CGCTGCCCCAGCCCCGTTCCTTCCGATGACAGTGCTC ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA

View online »

Protein Sequence:

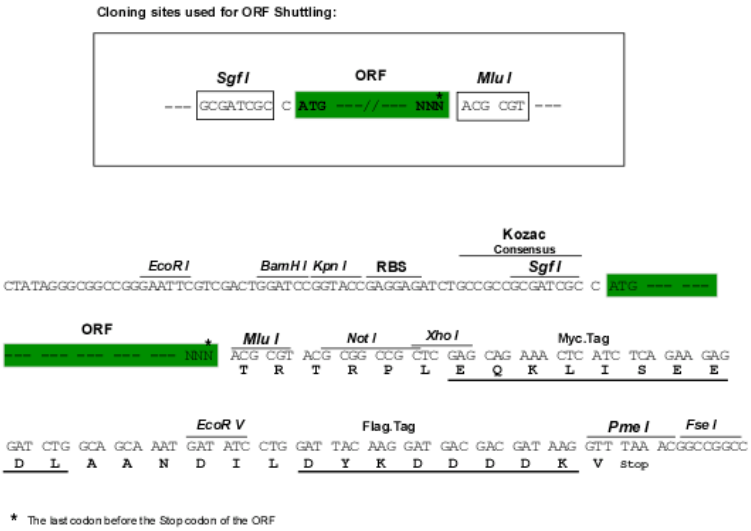
>RC219450 representing NM_213648
Red=Cloning site Green=Tags(s)

MYKETVYSAFNLLMHYPPPSGAGQHPQPQPPLHKANQPPHGVPQLSLYEHFNSPHPTPAPADISQKQVHR
PLQTPDLSGFYSLTSGSMGQLPHTVSWFTHPSLMLGSGVPGHPAAIPHPAIVPPSGKQELQPFDRNLKTQ
AESKAEKEAKKPTIKKPLNAFMLYMKEMRAKVIAECTLKESAAINQILGRRWHALSREEQAKYYELARKE
RQLHMQLYPGWSARDNYGKKKRRSREKHQESTTGGKRNAFGTYPEKAAAPAPFLPMTVL

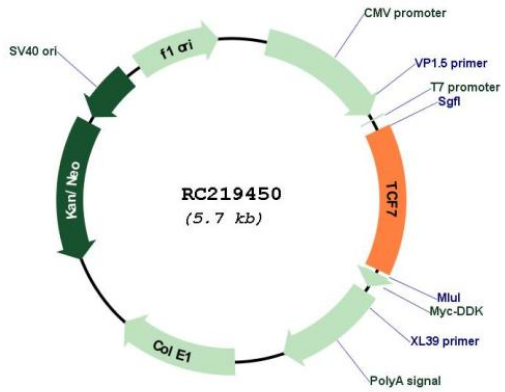
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_213648

ORF Size: 807 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:	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_213648.5
RefSeq Size:	3073 bp
RefSeq ORF:	810 bp
Locus ID:	6932
UniProt ID:	P36402
Cytogenetics:	5q31.1
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
MW:	30.2 kDa
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]