

Product datasheet for SC317616

TCF7 (NM_003202) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: TCF7 (NM_003202) Human Untagged Clone

Tag: Tag Free

Symbol: TCF7

Synonyms: TCF-1

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Fully Sequenced ORF: >NCBI ORF sequence for NM_003202, the custom clone sequence may differ by one or more

nucleotides

ATGCCGCAGCTGGACTCCGGCGGGGGGGGCGGCGGCGGCGACCACCTCGGCGCCGGACGACCTGC TCTTCCCGGACAAACTTCCAGAGCCCCTGGAGGACGGCCTGAAGGCCCCGGAGTGCACCAGCGGCATGTA AACATTTCAACAGCCCACATCCCACCCTGCACCTGCGGACATCAGCCAGAAGCAAGTTCACAGGCCTCT GCAGACCCCTGACCTCTCTGGCTTCTACTCCCTGACCTCAGGCAGCATGGGGCAGCTCCCCCACACTGTG AGCTGGTTCACCCACCCATCCTTGATGCTAGGTTCTGGTGTACCTGGTCACCCAGCAGCCATCCCCCACC CGGCCATTGTGCCCCCCTCAGGGAAGCAGGAGCTGCAGCCCTTCGACCGCAACCTGAAGACACAAGCAGA GTCCAAGGCAGAGAAGGAGGCCAAGAAGCCAACCATCAAGAAGCCCCTCAATGCCTTCATGCTGTACATG AAGGAGATGAGAGCCAAGGTCATTGCAGAGTGCACACTTAAGGAGAGCGCTGCCATCAACCAGATCCTGG GCCGCAGGTGGCACGCGCTGTCGCGAGAAGAGCAGGCCAAGTACTATGAGCTGGCCCGCAAGGAGAGGCA GCTGCACATGCAGCTATACCCAGGCTGGTCAGCGCGGGACAACTACGGGAAGAAGAAGAGGCGGTCGAGG GAAAAGCACCAAGAATCCACCACAGGAGGAAAAAGAAATGCATTCGGTACTTACCCGGAGAAGGCCGCTG CCCCAGCCCCGTTCCTTCCGATGACAGTGCTCTAG

Restriction Sites: Please inquire **ACCN:** NM 003202



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OTI Disclaimer:

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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. <u>More info</u>

OTI Annotation:

This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

Components:

Domains:

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: <u>NM 003202.2, NP 003193.2</u>

HMG

 RefSeq Size:
 3283 bp

 RefSeq ORF:
 1155 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



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]

Transcript Variant: This variant (1) encodes isoform (1).