

Product datasheet for **SC118129**

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 Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_003202, the custom clone sequence may differ by one or more nucleotides

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ATGCCGCAGCTGGACTCCGGCGGGGCGGGCGGGCGGGCGGGCGACGACCTCGGCGCGCCGGACGAGCTGC
TGGCCTTCCAGGATGAAGGCGAGGAGCAGGACGACAAGAGCCGCGACAGCGCCCGGTCGCCGAGCGCGA
CCTGGCCGAGCTCAAGTCGTCGCTCGTGAACGAGTCCGAGGGCGCGGGCGGGCGCGCAGGGATCCCGGGG
GTCCCGGGGGCCGGCGCCGGGGCCCGGGCGAGGCGGAGGCTCTCGGGCGGGAACACGCTGCGCAGAGAC
TCTTCCCGGACAAACTTCCAGAGCCCTGGAGGACGGCCTGAAGGCCCGGAGTGCACCAGCGGCATGTA
CAAAGAGACCGTCTACTCCGCTTCAATCTGCTCATGCATTACCCACCCCTCGGGAGCAGGGCAGCAC
CCCCAGCCGAGCCCCGCTGCACAAGGCAATCAGCCCCCACGGTGTCCCCAACTCTCTCTACG
AACATTTCAACAGCCACATCCCACCCCTGCACCTGCGGACATCAGCCAGAAGCAAGTTCACAGGCCTCT
GCAGACCCCTGACCTCTCTGGCTTCTACTCCCTGACCTCAGGCAGCATGGGGCAGCTCCCCACACTGTG
AGCTGGTTCACCCACCATCCTTGATGCTAGGTTCTGGTGTACCTGGTCACCCAGCAGCCATCCCCACC
CGGCCATTGTGCCCCCTCAGGGAAGCAGGAGCTGCAGCCCTTCGACCGCAACCTGAAGACACAAGCAGA
GTCCAAGGCAGAGAAGGAGGCCAAGAAGCCAACCATCAAGAAGCCCTCAATGCCTTCATGCTGTACATG
AAGGAGATGAGAGCCAAGGTCATTGCAGAGTGCACACTAAGGAGAGCGTGCCATCAACCAGATCCTGG
GCCGCAGGTGGCACGCGCTGTGCGGAGAAGAGCAGGCCAAGTACTATGAGCTGGCCCGCAAGGAGAGGCA
GCTGCACATGCAGCTATACCCAGGCTGGTCAGCGGGGACAACACGGGAAGAAGAAGAGGCGGTCGAGG
GAAAAGCACCAAGAATCCACCACAGGAGGAAAAAGAAATGCATTCCGTAATTACCCGAGAAAGGCCGCTG
CCCCAGCCCGTTCTTCCGATGACAGTGTCTAG
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5' Read Nucleotide Sequence:

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>OriGene 5' read for NM_003202 unedited
GCAGATATTTGTATACGACTCACTATAGGGCGGCCGATTTCGGCACGAGGGCCGGACGA
GCTGCTGGCCTTCCAGGATGAAGGCGAGGAGCAGGACGACAAGAGCCGCGACAGCGCCGC
CGGTCCCAGCGCGACCTGGCCGAGCTCAAGTCGTGCTCGTGAACGAGTCCGAGGGCGC
GGCCGGCGGCGCAGGGATCCCAGGGGTCGCGGGGGCCGGCGCCGGGGCCCGCGGCGAGGC
CGAGGCTCTCGGGCGGGAACACGCTGCGCAGAGACTCTTCCCGGACAAACTTCCAGAGCC
CCTGGAGGACGGCCTGAAGGCCCGGAGTGACCCAGCGGCATGTACAAAGAGACCGTCTA
CTCCGCTTCAATCTGCTCATGCTTTACCCACCCCTCGGGAGCAGGGCAGCACCCCA
GCCGACGCCCGCTGCACAAGGCAATCAGCCCCCACGGTGTCCCCAACTCTCTCT
CTACGAACATTTCAACAGCCACATCCCACCCCTGCACCTGCGGACATCAGCCAGAAGCA
AGTTCACAGGCCTCTGCAGACCCCTGACCTCTCTGGTCTACTCCCTGACCTCAGGCAG
CATGGGCGAGCTCCCCACACTGTGAGCTGGTTCACCCACCCATCCTTGATGCTAGGGTT
CTGGTGTACCTGGTCACCCAGCAGCCATCCCCACCCGGCCATTGTGCCCCCTCNAGGA
AGCAGGAGCTGCAGCCCTTCGACCGCAACTGAAGAACAAGCAGAGTCCAAGGCAGAGAA
GGAGGCCAAGAAGCCAACCATCAAGAAGCCCTCAATGCCTTCATGCTGNTACATGANAG
GAGATGAGAGCCAAGGTCAATTGTGAGAGTGCACACTTNANGGAGAGCGCTGCCATACCA
GATCTGGNNGCCGAGGTGGCACGCGTGTGCGAGNAAAACAGGCCAAGTCTTATGAGCT
GGCCGCCAAGGAGAGCAGCTGACAT
```

3' Read Nucleotide Sequence:

```
>OriGene 3' read for NM_003202 unedited
TGTACGCGGCCGCAATCTANAGTCGAGNTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT
TTTTTTTTTTTTTTTTTTTTTTTTTTTTTCAAGTTTTAAAAAACAACCCCACTAAAAAGT
TTTTTTTTTCTAAGTTAAAAAGTTTTTTTATGAGGAGGCTTTACCAAACCAAAAATTTT
TGGAAACCTAAAAAATTTTTTCTAAAACTTTTGGCGGGTAACACTAAAAAAGGGGA
CTTTGGGATTCGGA AAAACCAGGGTTAAAGGAGGACCTAAGGGTTTTTTTGGGGGGGG
GGGAAAACCAGGGACAGCCCTTTTTTTTTTTTTTTTTTTTTTTGGAAAGGCACCCCTT
GTCCCCAAACGGGGGGGCAAAACCCCTTCTGGGCTAATGGGAACCCCTCCGGGG
TTAAAGGGATTTTCCCCCCCCACCCCGAGTAGGGGGATTACAGGGCCCCCAACCA
GGGCGGTAAATTTTTGTTTTTAAAGAAAACCAGGGTTCCCAAGGGGGCCAGGTGGG
CTCAAACTTCGACGCGGGGGGACCCCGCCCGCCCGCCGCAAAAGGGCTGGGATCAC
GGCGGGGAGACCCCGCCCGGGGCAAAAGCCTTTTTTTTTTTGGGTTTAGGCAAAAACA
AAATTAATTAAGGATTTGTTTTTAAAGTTGCGGGTTAACCTGGGTTCAAAAAGGGT
AACCGGAGCCTTTGGGAAACCCGGGTGCCATTCCGGAGGGTTTTGGGCCTCTCTGAA
TATTGAAAGGCGCTTCTGCCCCCCCTTGGGAAAATGGACCCGCCGGGGGCTGAAG
GCTAAAAAAGCCTTGGGCTTCAAGAGAGGTTGGTTTGCCTCAACACGCCCAAGACT
GGGGGAATGCCAAAAGAG
```

Restriction Sites:

ECoRI-NOT

ACCN:

NM_003202

Insert Size:

3000 bp

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. [More info](#)

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_003202.1](#), [NP_003193.1](#)

RefSeq Size: 3277 bp

RefSeq ORF: 807 bp

Locus ID: 6932

UniProt ID: [P36402](#)

Cytogenetics: 5q31.1

Domains: HMG

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).