

Product datasheet for **RG228404**

TCF7L2 (NM_001146283) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TCF7L2 (NM_001146283) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	TCF7L2
Synonyms:	TCF-4; TCF4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG228404 representing NM_001146283
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCCCGAGCTGAACGGCGGTGGAGGGGATGACCTAGGCGCCAACGACGAACTGATTTCTTCAAAGACG
 AGGGCGAACAGGAGGAGAAGAGCTCCGAAAACCTCTCGGCAGAGAGGGATTTAGCTGATGTCAAATCGTC
 TCTAGTCAATGAATCAGAAACGAATCAAAAACAGCTCCTCCGATTCGAGGCGGAAAGACGGCCTCCGCCCT
 CGCTCCGAAAGTTTCCGAGACAAATCCCGGAAAGTTTGAAGAAGCGGCCAAGAGGCAAGATGGAGGGC
 TCTTTAAGGGGCCACCGTATCCCGGCTACCCCTTCATCATGATCCCCGACCTGACGAGCCCTACCTCCC
 CAACGGATCGCTCTCGCCACCGCCGAACCTATCTCCAGATGAAATGGCCACTGCTTGTATGTCCAGGCA
 GGGAGCCTCCAGAGTAGACAAGCCCTCAAGGATGCCCGGTCCCCATCACCGGCACACATTGTCAGCCCCC
 TCCCTTGTGCACTCAGGACATGACTGTCAGCACTTCTACCCCCCTCAGACTTCACTGTCAGCACTCA
 AGTCTTCAGGGACATGAAAAGGAGCCACTCCTTACAAAAGTTGGGGAGCCCTGGTGTATTGAGTCTAAC
 AAAGTGCCAGTGGTGCAGCACCCCTACCATGTCCACCCCTCACGCCTTATACAGTACAGCAATGAAC
 ACTTCACGCCGGGAAACCCACCTCCACACTTACCAGCCGACGTAGACCCCAAAACAGGAATCCCACGGCC
 TCCGCACCCTCCAGATATATCCCGTATTACCCACTATCGCCTGGCACCGTAGGACAAATCCCCATCCG
 CTAGGATGGTTAGTACCACAGCAAGGTCAACCAGTGTACCCAATCACGACAGGAGGATTACAGACCCCT
 ACCCCACAGCTCTGACCGTCAATGCTTCCATGTCCAGGTTCCCTCCCATATGGTCCCACCACATCATA
 GCTACACACGACGGGCATTCCGCATCCGGCCATAGTCACACCAACAGTCAAACAGGAATCGTCCCAGAGT
 GATGTCGGCTCACTCCATAGTTCAAAGCATCAGGACTCCAAAAGGAAGAAGAAAAGAAAGGCCCCACA
 TAAAGAAAACCTCTTAATGCATTCATGTTGTATATGAAGGAAATGAGAGCAAAGGTGATGAGTGCAC
 GTTGAAGAAGAAAGCGCGGCCATCAACCAGATCCTTGGGCGGAGGTGGCATGCACTGTCCAGAGAAGGCAA
 GCGAAATACTACGAGCTGGCCCGAAGGAGCGACAGCTTCATATGCAACTGTACCCCGGCTGGTCCGCGC
 GGGATAACTATGGAAAGAAGAAGAGGAAAAGGGACAAGCAGCCGGGAGAGACCAATGGAGAAAAAAA
 AAGTGCCTTCGCTACATACAAGGTGAAGGCAGCTGCCTCAGCCACCCTTTCAGATGGAAGCTTAC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG228404 representing NM_001146283
 Red=Cloning site Green=Tags(s)

MPQLNGGGDDLGADELISFKDEGEQEEKSSENSAERDLADVKSSLVNESETNQSSSDSEAERRPPP
 RSEFRDKSRESLEEAARKQDGGFLKGGPPYGPYPFIMIPDLTSPYLPNGSLSPARTYTLQMKWPLLDVQA
 GSLQSRQALKDARSPSPAHIVSPLPCCTQGHDCQHFYPPSDFTVSTQVFRDMKRSHSLQKVGEPWCIESN
 KVPVVQHPHHVHPLTPLITYSNEHFTPGNPPPHLPADVDPKTGIPRPPHPPDISPYYPSPGTVGQIPHP
 LGWLVPQGPVYPIITGGFRHPYPTALTVNASMSRFPPHMVPPHHTLHTTGIPHPAIVTPTVKQESSQS
 DVGSLHSSKHQDSKKEEKKKPHIKKPLNAFMLYMKEMRAKVVAECTLKESAAINQILGRRWHALSREEQ
 AKYYELARKERQLHMQLYPGWSARDNYGKKKKRKRDKQPGETNGEKKSAFATYKVKAAAASAHPLQMEAY

TRTRPLE – GFP Tag – V

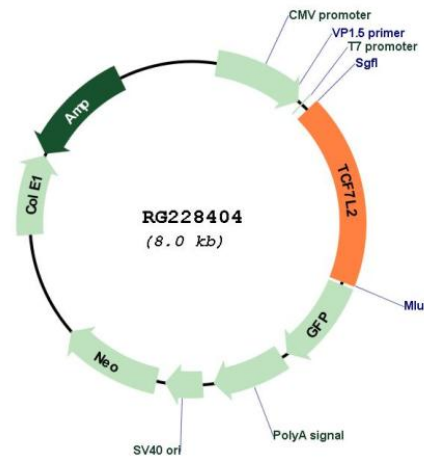
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001146283

ORF Size: 1467 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_001146283.2](#)

RefSeq Size: 4021 bp

RefSeq ORF: 1470 bp

Locus ID: 6934

UniProt ID: [Q9NQB0](#)

Cytogenetics: 10q25.2-q25.3

Protein Families: Druggable Genome, 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 high mobility group (HMG) box-containing transcription factor that plays a key role in the Wnt signaling pathway. The protein has been implicated in blood glucose homeostasis. Genetic variants of this gene are associated with increased risk of type 2 diabetes. Several transcript variants encoding multiple different isoforms have been found for this gene.[provided by RefSeq, Oct 2010]