

## Product datasheet for **MG224182**

### **Tcf7l2 (NM\_001142922) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Tcf7l2 (NM_001142922) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Tcf7l2
Synonyms:	Tcf-4; Tcf4; TCF4B; TCF4E
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MG224182 representing NM\_001142922  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCCGACGTGAACGGCGGTGGAGGAGATGACCTAGGCGCTAACGACGAGCTGATCTCCTTCAAAGACG  
 AAGGCGAGCAGGAGGAGAAGAACTCGGAAAACCTCTCGGCGGAAAGGATTTAGCCGATGTCAAGTCCTC  
 GCTGGTCAATGAATCAGAGACGAATCAAAACAGCTCCTCCGATTCGAGGCGGAAAGACGGCCTCCGCCCT  
 CGCTCCGAAAGTTTCCGAGATAAATCCCGGAAAGTTTGAAGAAGCGGCCAAGAGGCAAGATGGAGGGC  
 TCTTTAAGGGGCCACCGTATCCCGGCTACCCCTTCATCATGATCCCCGACCTGACGAGCCCTACCTCCC  
 CAACGGATCGCTCTCGCCACCGCCCGAACCTATCTTCAGATGAAATGGCCACTGCTTGATGTCCAAGCA  
 GGAAGCCTCCAGAGCAGACAAACCCTCAAGGATGCTCGTTCGCCGTCGCCAGCACACATCGTTTCGAACA  
 AAGTACCGGTGGTGAACACCCCACTGTCCACCCACTCACGCTCTCATCACGTACAGCAATGAACA  
 CTTACCCCGGAAATCCACCTCCGCACTTACCAGCTGACGTAGACCCAAAACAGGAATCCAAGGCCCT  
 CCGCACCTCCAGATATCTCTCATATTACCCGCTGTCGCCCGCACCGTAGGACAAATCCCCATCCGC  
 TAGGATGGTTAGTACCACAGCAAGGTCAGCCTGTGTACCAATACGACAGGAGGATTCAGACACCCCTA  
 CCCCACAGCGCTGACAGTCAACGCATCTATGTCTAGGTTCCCTCCCCATATGGTCCCTCCCCATCACT  
 CTGCACACGACCGGCATCCCTCACCCGGCCATCGTCACACCGACAGTCAAGCAGGAATCCTCCAGAGTG  
 ACGTCGGCTCACTCCACAGCTCAAAGCATCAGGACTCCAAAAGGAAGAAGAAGAAGAAGCCACAT  
 AAAGAAGCCCTTAATGCATTATGTTGTATATGAAAGAGATGAGAGCGAAGGTGGTGGCCGAATGCACA  
 TTGAAAGAGAGTGCAGCCATCAACCAGATTCTCGGGCGCAGGTGGCACGCCCTGTCCAGGGAAGAACAG  
 CAAAATACTACGAGCTGGCCCGGAAGGAACGACAGCTTCACATGCAGTGTACCTGGTCTGCACG  
 GGATAACTATGGGAAGAAGAAGAAGAAAAAGAGACAAGCAGCCGGGGAAACCAACGAACACAGCGAA  
 TGTTTCCTAAATCCTTGCTTTCGCTTCCGATCACAGACCTGAGCGCTCCTAAGAAATGCCAGCGC  
 GCTTTGGCCTTGATCAACAGAATAACTGGTGGCGCCCTGCAGGAGAAAAAAAAGTGCCTTCGCTACAT  
 ACAAGGTGAAGGCAGCTGCCTCAGCCACCCTCTTCAGATGGAAGCTTACTAGACTCGCCTCCCCCTCA  
 CCGCATCTGCTAGGCTCCCTCCCAAGACGCCAAGTACAGACTGAGCAGACCCAGCCGCTCTCGTGT  
 CCCTGAAGCCTGATCCTCTGGCCACCTGTCCATGATGCCTCCGCCACCCGCGCTCTGTGGCCGAAGC  
 TGCCACGGCAAGGCCTCTGCCCTGTCCCAATGGGGCTCTGGACCTGCCACCTGCCGCTCTGCAGCCG  
 TCCATGGTCCCTCCTCATCGCTCGCACAAACCACTCAACTTCTTCTTACATTCACCAACTCGCTGGCTG  
 GAACGCAACCCAGCCTCTGCTCTGGTACCAAGTCTTAGAA

**ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA**

**Protein Sequence:**

>MG224182 representing NM\_001142922  
 Red=Cloning site Green=Tags(s)

MPQLNGGGDDLGANDELI SFKDEGEQEEKNSSENSAERDLADV KSSLVNESETNQSSDSEAERRPPP  
 RSE SFRDKSRESLEEA AKRQD GGLFKGPPYPGYPFIMIPDLTSPYLPNGSL SPTARTYLQMKWPLLDVQA  
 GSLQSRQTLKDARSPSPAHIVSNKVPVVQHPHHVHPLTPLITYSNEHFTPGNPPPHLPADVDPKTI PRP  
 PHPPDISPYYP LSPGTVGQIPHPLGWLVPQQGPVYPIITGGFRHPYPTALTVNASMSRFP PHMVP PHHT  
 LHTTGIPHPAIVTPTVKQESSQSDV GSLHSSKHQDSKKEEKKKPHIKKPLNAFMLYMKEMRAKVVAECT  
 LKESAAINQILGRRWHALSREEQAKYYELARKERQLHMQLYPGWSARDNYGKKKKRKRDKQPGETNEHSE  
 CFLNPCLSLPPIIDL SAPKKCRARFGLDQNNWCGPCRKKKCVRYIQEGSCL SPPSSDGSLLDSPPS  
 PHLLGSP PQDAKSQTEQTQPLSLSLKPDPLAHL SMMPPPPALLLAEAAHGKASALCPNGALDLPPAALQP  
 SMPSSSLAQPSTSSLHSHNSLAGTQPQLSLVTKSLE

**TRTRPLE - GFP Tag - V**

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_001142922

**ORF Size:** 1794 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\\_001142922.2](#)

**RefSeq Size:** 4138 bp

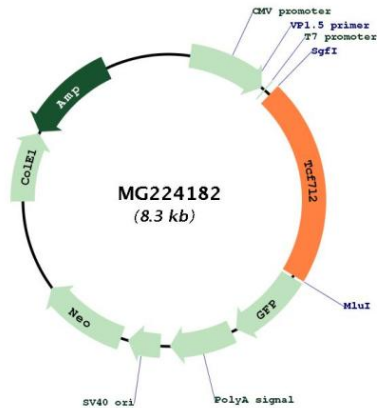
**RefSeq ORF:** 1797 bp

**Locus ID:** 21416

**Cytogenetics:** 19 51.59 cM

**Gene Summary:**

Participates in the Wnt signaling pathway and modulates MYC expression by binding to its promoter in a sequence-specific manner. Acts as repressor in the absence of CTNNB1, and as activator in its presence. Activates transcription from promoters with several copies of the Tcf motif CCTTTGATC in the presence of CTNNB1. TLE1, TLE2, TLE3 and TLE4 repress transactivation mediated by TCF7L2/TCF4 and CTNNB1. Expression of dominant-negative mutants results in cell-cycle arrest in G1 (By similarity). Necessary for the maintenance of the epithelial stem-cell compartment of the small intestine.[UniProtKB/Swiss-Prot Function]

**Product images:**

Circular map for MG224182