

## Product datasheet for **MG224589**

### Tcf7l2 (NM\_001142920) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Tcf7l2 (NM\_001142920) 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)  
**ORF Nucleotide Sequence:** >MG224589 representing NM\_001142920  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGCCGCAGCTGAACGGCGGTGGAGGAGATGACCTAGGCGCTAACGACGAGCTGATCTCCTTCAAAGACG  
AAGGCGAGCAGGAGGAGAAGAACTCGGAAAACCTCGGCGGAAAGGGATTTAGCCGATGTCAAGTCCTC  
GCTGGTCAATGAATCAGAGACGAATCAAAACAGCTCCTCCGATTCGAGGCGGAAAGACGGCCTCCGCT  
CGCTCCGAAAGTTCCGAGATAAATCCCGGAAAGTTTGAAGAAGCGGCCAAGAGGCAAGATGGAGGGC  
TCTTTAAGGGGCCACCGTATCCCGGCTACCCCTTCATCATGATCCCCGACCTGACGAGCCCTACCTCCC  
CAACGGATCGCTCTCGCCACCGCCGAACCTCCATTTCAATCCGGCAGCACTCATTACTCTGGGTAC  
AAAACGATTGAACACCAGATTGCAATTCAGTATCTTCAGATGAAATGGCCACTGCTTGATGTCCAAGCAG  
GAAGCCTCCAGAGCAGACAAACCCTCAAGGATGCTCGTTCGCCGTGCGCCAGCACACATCGTTTGAACAA  
AGTACCGGTGGTGAACACCCCAACATGTCCACCCACTCACGCCTCTCATCACGTACAGCAATGAACAC  
TTCACCCCGGAAATCCACCTCCGCACTTACCAGCTGACGTAGACCCCAAAACAGGAATCCCAAGGCCTC  
CGCACCTCCAGATATCTCTCCATATTACCCGCTGTGCGCCGGCACCGTAGGACAAATCCCCATCCGCT  
AGGATGGCAAGGTGAGCCTGTGTACCAATCACGACAGGAGGATTCAGACACCCCTACCCACAGCGCTG  
ACAGTCAACGCATCTATGTCTAGCTTTCTGTCTCTAGGTTCCCTCCCATATGGTCCCTCCCATCACA  
CTCTGCACACGACCGGCATCCCTCACCCGCCATCGTACACCGACAGTCAAGCAGGAATCCTCCAGAG  
TGACGTGCGGCTCACTCCACAGCTCAAAGCATCAGGACTCCAAAAAGGAAGAAGAGAAGAAGGCCAC  
ATAAAGAAGCCCTTAATGCATTCATGTTGTATATGAAAGAGATGAGAGCGAAGGTGGTGGCCGAATGCA  
CATTGAAAGAGAGTGCAGCCATCAACCAGATTCTCGGGCGCAGGTGGCACGCCCTGTCCAGGAAGAACA  
GGCAAAATACTACGAGCTGGCCCGAAGGAACGACAGCTTCACATGCAGCTGTACCCTGGCTGGTCTGCA  
CGGGATAACTATGAGAAAAAAAAGTGCCTTCGCTACATACAAGG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



**Protein Sequence:** >MG224589 representing NM\_001142920  
Red=Cloning site Green=Tags(s)

MPQLNGGGDDLGADELISFKDEGEQEEKNSSENSAERDLADVKSSLVNESETNQSSSDSEARRPPP  
 RSESRDKSRESLEEAARKQDGGGLFKGPPYPGYPFIMIPDLTSPYLPNGSLSPTARTLHFQSGSTHYSAY  
 KTIEHQIAIQYLQMKWPLLDVQAGLSQRQTLKDARSPSPAHIIVSNKVPVVQHPHHVHPLTPLITYSNEH  
 FTPGNPPPHLPADVDPKTGIPRPPHPDDISPYPLSPGTVGQIPHPLGWQGPVYPITGGFRHPYPTAL  
 TVNASMSSFLSSRFPPHMVPPHHTLHTTGIPHPAIVTPTVKQESSQSDVGSLSHSSKHQDSKKEEEKKPKH  
 IKKPLNAFMLYMKEMRAKVVAECTLKESAAINQILGRRWHALSREEQAKYYELARKERQLHMQLYPGWSA  
 RDNYEKKKVRS LHTR

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001142920

**ORF Size:** 1305 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\\_001142920.2](#)

**RefSeq Size:** 4037 bp

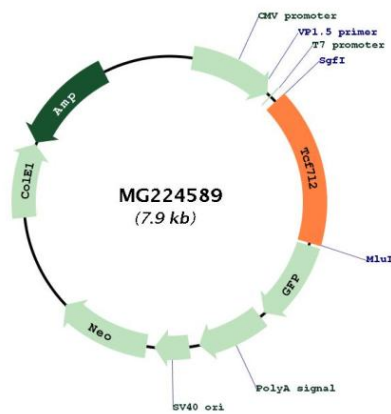
**RefSeq ORF:** 1308 bp

**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 MG224589