

## Product datasheet for **MG224188**

### Tcf7l2 (NM\_001142924) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Tcf7l2 (NM\_001142924) 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:** >MG224188 representing NM\_001142924  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGTCGAACAAAGTACCGGTGGTGCAACACCCCCACCATGTCCACCCACTCAGCCTCTCATCACGTACA  
 GCAATGAACACTTCACCCCGGAAATCCACCTCCGCACTTACCAGCTGACGTAGACCCCAAAACAGGAAT  
 CCCAAGGCCTCCGACCCCTCCAGATATCTCTCCATATTACCCGCTGTCGCCGGCACCGTAGGACAAATC  
 CCCCATCCGCTAGGATGGTTAGTACCACAGCAAGGTCAGCCTGTGTACCCAATCACGACAGGAGGATTCA  
 GACACCCCTACCCACAGCGCTGACAGTCAACGCATCTATGTCTAGGTTCCCTCCCATATGGTCCCTCC  
 CCATCACACTCTGCACACGACCGGCATCCCTCACCCGGCCATCGTCACACGACAGTCAAGCAGGAATCC  
 TCCCAGAGTGACGTCCGGCTCACTCCACAGCTCAAAGCATCAGGACTCCAAAAAGGAAGAAGAAGAAGA  
 AGCCCCACATAAAGAAGCCCTTAATGCATTATGTTGTATATGAAAGAGATGAGAGCGAAGGTGGTGGC  
 CGAATGCACATTGAAAGAGAGTGCAGCCATCAACCAGATTCTCGGGCGCAGGTGGCACGCCCTGTCCAGG  
 GAAGAACAGGCAAAATACTACGAGCTGGCCCGAAGGAACGACAGCTTCACATGCAGCTGTACCCCTGGCT  
 GGTCTGCACGGGATAACTATGGGAAGAAGAAGAAGAAAAAGAGACAAGCAGCCGGGGAAACCAACGA  
 ACACAGCGAATGTTTCCTAAATCCTTGCCTTTCGCTTCCGATCACAGACCTGAGCGCTCCTAAGAAA  
 TGCCGAGCGCGCTTTGGCCTTGATCAACAGAATAACTGGTGCGGCCCTGCAGTCTT

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA



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**Protein Sequence:** >MG224188 representing NM\_001142924  
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MSNKVPVVQHPHHVHPLTPLITYSNEHFTPGNPPHLPADVDPKTGIPRPPHPPDISPYYP LSPGTVGQI  
 PHPLGWLVPQQGPVYPIITGGFRHPYPTALTVNASMSRFPHPMVPHTLHTTGIPHPAIVTPTVKQES  
 SQSDVGSLSHSSKHQDSKKEEKKKPHIKKPLNAFMLYMKEMRAKVVAECTLKESAAINQILGRRWHALS  
 EEQAKYELARKERQLHMQLYPGWSARDNYGKKKKRKRDKQPGETNEHSECF LNPCLSLPPITDLSAPKK  
 CRARFGLDQNNWCGPCSL

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001142924

**ORF Size:** 897 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\\_001142924.2](#)

**RefSeq Size:** 3465 bp

**RefSeq ORF:** 900 bp

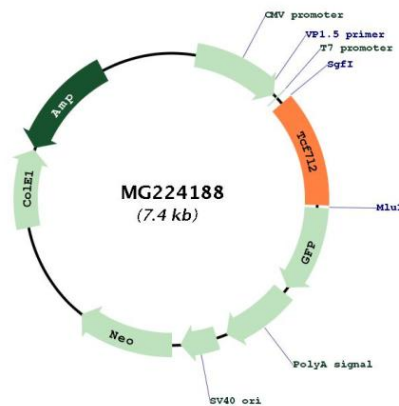
**Locus ID:** 21416

**UniProt ID:** [Q924A0](#)

**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 MG224188