

Product datasheet for **MG224173**

Tcf7l2 (NM_001142918) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tcf7l2 (NM_001142918) 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:

>MG224173 representing NM_001142918
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGCCGACGTGAACGGCGGTGGAGGAGATGACCTAGGCGCTAACGACGAGCTGATCTCCTTCAAAGACG
 AAGGCGAGCAGGAGGAGAAGAACTCGGAAAACCTCTCGGCGGAAAGGATTTAGCCGATGTCAAGTCCTC
 GCTGGTCAATGAATCAGAGACGAATCAAAACAGCTCCTCCGATTCGAGGCGGAAAGACGGCCTCCGCCCT
 CGCTCCGAAAGTTTCCGAGATAAATCCCGGAAAGTTTGAAGAAGCGGCCAAGAGGCAAGATGGAGGGC
 TCTTTAAGGGGCCACCGTATCCCGGCTACCCCTTCATCATGATCCCCGACCTGACGAGCCCTACCTCCC
 CAACGGATCGCTCTCGCCACCGCCCGAACCTATCTTCAGATGAAATGGCCACTGCTTGATGTCCAAGCA
 GGAAGCCTCCAGAGCAGACAAACCCTCAAGGATGCTCGTTCGCCGTCGCCAGCACACATCGTTTCGAACA
 AAGTACCGGTGGTGAACACCCCAACCATGTCCACCCACTCACGCCTCTCATCACGTACAGCAATGAACA
 CTTACCCCGGAAATCCACCTCCGCACTTACCAGCTGACGTAGACCCCAAAACAGGAATCCAAGGCCCT
 CCGCACCTCCAGATATCTCTCATATTACCCGCTGTCGCCCGGACCGTAGGACAAATCCCCATCCGC
 TAGGATGGTTAGTACCACAGCAAGGTCAGCCTGTGTACCCAATCACGACAGGAGGATTCAGACACCCCTA
 CCCCACAGCGCTGACAGTCAACGCATCTATGTCTAGGTTCCCTCCCCATATGGTCCCTCCCCATCACT
 CTGCACACGACCGGCATCCCTCACCCGGCCATCGTCACACCGACAGTCAAGCAGGAATCCTCCAGAGTG
 ACGTCGGCTCACTCCACAGCTCAAAGCATCAGGACTCCAAAAGGAAGAAGAAGAAGAAGAAGCCCAT
 AAAGAAGCCCTTAATGCATTATGTTGTATATGAAAGAGATGAGAGCGAAGGTGGTGGCCGAATGCACA
 TTGAAAGAGAGTGCAGCCATCAACCAGATTCTCGGGCGCAGGTGGCACGCCCTGTCCAGGGAAGAACAGG
 CAAAATACTACGAGCTGGCCCGGAAGGAACGACAGCTTCACATGCAGCTGTACCTGGCTGTGCACG
 GGATAACTATGGGAAGAAGAAGAAGAGAAAAAGAGACAAGCAGCCGGGGAAACCAACGAACACAGCGAA
 TGTTTCCTAAATCCTTGCTTTCTCGTTCCTCCGATCACAGACCTGAGCGCTCCTAAGAAATGCCGAGCGC
 GCTTTGGCCTTGATCAACAGAATAACTGGTGGGCCCTGCAGTCTT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG224173 representing NM_001142918
 Red=Cloning site Green=Tags(s)

MPQLNGGGDDLGANDELSFKDEGEQEEKNSSENSAERDLADVKSLLVNESETNQSSSDSEAERRPPP
 RSESFDRKSRESLEEAARKRQDGLFKGPPYPGYPFIMIPDLTSPYLPNGSLSPARTYTLQMKWPLLDVQA
 GSLQSRQTLKDARSPSPAHIVSNKVPVVQHPHHVHPLTPLITYSNEHFTPGNPPPHLPADVDPKTGIPRP
 PHPPDISPYYPPLSPGTVGQIPHPLGWLVPQQGQPVYPIITGGFRHPYPTALTVNASMSRFPHPMVPPHHT
 LHTTGIPHPAIVTPTVKQESSQSDVGLHSSKHQDSKKEEEKKPHIKKPLNAFMLYMKEMRAKVVAECT
 LKESAAINQILGRRWHALSREEQAKYYELARKERQLHMQLYPGWSARDNYGKKKKRKRDKQPGETNEHSE
 CFLNPCLSLPPIIDLAPKKCRARFGLDQNNWCGPCSL

TRTRPLE - GFP Tag - V

Chromatograms:

https://cdn.origene.com/chromatograms/ja1254_g05.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_001142918

ORF Size: 1377 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](#)

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:

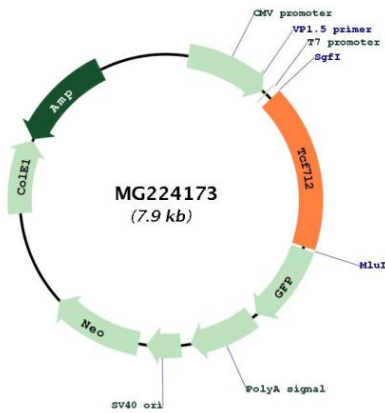
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store 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_001142918.2](#)

RefSeq Size: 4163 bp
 RefSeq ORF: 1380 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 MG224173