

Product datasheet for **MR224182**

Tcf7l2 (NM_001142922) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tcf7l2 (NM_001142922) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Tcf7l2
Synonyms:	Tcf-4; Tcf4; TCF4B; TCF4E
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MR224182 representing NM_001142922
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCCCGAGCTGAACGGCGGTGGAGGAGATGACCTAGGCGCTAACGACGAGCTGATCTCCTTCAAAGACG
 AAGGCGAGCAGGAGGAGAAGAACTCGGAAAACCTCTCGGCGGAAAGGATTTAGCCGATGTCAAGTCCTC
 GCTGGTCAATGAATCAGAGACGAATCAAAAACAGCTCCTCCGATTCGAGGCGGAAAGACGGCCTCCGCCCT
 CGCTCCGAAAAGTTCCGAGATAAATCCCGGAAAGTTTGAAGAAGCGGCCAAGAGGCAAGATGGAGGGC
 TCTTTAAGGGGCCACCGTATCCCGGCTACCCCTTCATCATGATCCCCGACCTGACGAGCCCTACCTCCC
 CAACGGATCGCTCTCGCCACCGCCCGAACCTATCTTCAGATGAAATGGCCACTGCTTGATGTCCAAGCA
 GGAAGCCTCCAGAGCAGACAAACCCTCAAGGATGCTCGTTCGCCGTCGCCAGCACACATCGTTTCGAACA
 AAGTACCGGTGGTGAACACCCCACTGTCCACCCACTCACGCTCTCATCACGTACAGCAATGAACA
 CTTACCCCGGAAATCCACCTCCGCACTTACCAGCTGACGTAGACCCCAAAACAGGAATCCAAGGCCCT
 CCGCACCTCCAGATATCTCTCCATATTACCCGCTGTCGCCCGCACCGTAGGACAAATCCCCATCCGC
 TAGGATGGTTAGTACCACAGCAAGGTCAGCCTGTGTACCAATACGACAGGAGGATTCAGACACCCCTA
 CCCCACAGCGCTGACAGTCAACGCATCTATGTCTAGGTTCCCTCCCCATATGGTCCCTCCCCATCACT
 CTGCACACGACCGGCATCCCTCACCCGGCCATCGTCACACCGACAGTCAAGCAGGAATCCTCCAGAGTG
 ACGTCGGCTCACTCCACAGCTCAAAGCATCAGGACTCCAAAAGGAAGAAGAAGAAGAAGAAGCCCAT
 AAAGAAGCCCTTAATGCATTATGTTGTATATGAAAGAGATGAGAGCGAAGGTGGTGGCCGAATGCACA
 TTGAAAGAGAGTGCAGCCATCAACCAGATTCTCGGGCGCAGGTGGCACGCCCTGTCCAGGGAAGAACAG
 CAAAATACTACGAGCTGGCCCGGAAGGAAACGACAGCTTCACATGCAGCTGTACCTGGTGTGCACG
 GGATAACTATGGGAAGAAGAAGAAGAGAAAAAGAGACAAGCAGCCGGGGAAACCAACGAACACAGCGAA
 TGTTTCCTAAATCCTTGCTTTCTCGTTCCTCCGATCACAGACCTGAGCGCTCCTAAGAAATGCCAGCGC
 GCTTTGGCCTTGATCAACAGAATAACTGGTGGCGCCCTGCAGGAGAAAAAAAAGTGCCTTCGCTACAT
 ACAAGGTGAAGGCAGCTGCCTCAGCCACCCTCTTCAGATGGAAGCTTACTAGACTCGCCTCCCCCTCA
 CCGCATCTGCTAGGCTCCCTCCCAAGACGCCAAGTACAGACTGAGCAGACCCAGCCGCTCTCGTGT
 CCCTGAAGCCTGATCCTCTGGCCACCTGTCCATGATGCCTCCGCCACCCGCGCTCTGTGGCCGAAGC
 TGCCACGGAAGCCTCTGCCCTGTGCCAATGGGGCTCTGGACCTGCCACCTGCCGCTCTGCAGCCG
 TCCATGGTCCCTCCTCATCGCTCGCACAAACCATCAACTTCTTCTTACATTCCCAACTCGCTGGCTG
 GAACGCAACCCAGCCTCTGTCTCTGGTACCAAGTCTTAGAA

ACGCGTACGCGGCGGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR224182 representing NM_001142922
 Red=Cloning site Green=Tags(s)

MPQLNGGGDDLGANDELSFKDEGEQEEKNSSENSAERDLADVKSLLVNESETNQSSSDSEARRPPP
 RSESRDKSRESLEEAQRQDGLFKGPPYPGYPFIMIPDLTSPYLPNGSLSPARTYTLQMKWPLLDVQA
 GSLQSRQTLKDRSPSPAHIVSNKVPVQHPHHVHPLTPLITYSNEHFTPGNPPPHLPADVDPKTIIPRP
 PHPPDISPYYPSPGTVGQIPHPLGWLVPQQGQPVYPIITGGFRHPYPTALTVNASMSRFPHPMVPPHHT
 LHHTGIPHPAIVTPTVKQESSQSDVGLHSSKHQDSKKEEKKKPHIKKPLNAFMLYMKEMRAKVVAECT
 LKESAAINQILGRRWHALSREEQAKYYELARKERQLHMQLYPGWSARDNYGKKKKRKRDKQPGETNEHSE
 CFLNPCLSLPPIIDLAPKRCRARFGLDQNNWCGPCRKKKCVRYIQEGSCLSPSSDGLLDSPPPS
 PHLLGSPQDAKSQTEQTQPLSLSLKPDPLAHL SMMPPPALLLAEAAHGKASALCPNGALDLPALQP
 SMPVSSSLAQPSTSSLHSHNSLAGTQPQLSLVTKSLE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mm9076_c10.zip

Restriction Sites: SgfI-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

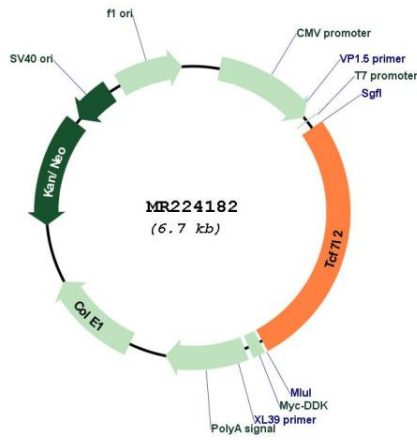
Locus ID: 21416

Cytogenetics: 19 51.59 cM

MW: 65.6 kDa

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 MR224182