

Product datasheet for **MG225778**

Tcf3 (NM_001164148) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tcf3 (NM_001164148) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Tcf3
Synonyms:	A1; AA408400; ALF2; AW209082; bHLHb21; E2A; E12; E12/E47; E47; KA1; ME2; Pan1; Pan2; TCF-3; Tcfe2a
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG225778 representing NM_001164148
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGATGAACCACTCTCAGAGAATGGCACCCGTGGGCTCTGACAAGGAAGTGAAGTACCTCCTGGACTTCA
 GCATGATGTTCCCGCTACCTGTGGCCAATGGGAAGAGCCGGCCCGCTCCCTCGGGGAACCCAGTTTGC
 AGGCTCAGGACTGGAGGACCGACCCAGCTCAGGCTCCTGGGGCAGCAGTGACCAGAACAGTTCTTCTTT
 GACCTAGCCGGACATACAGCGAAGGTGCCACTTCAGTGACTCCACAGCAGCCTGCCGCTTCCACGT
 TCCTAGGAGCTGGGCTTGGAGGCAAGGGCAGTGAGCGAATGCCTATGCCACCTTTGGGAGAGACCCAG
 TGTTGGCACCTTGAGTCAGGCTGGCTTCTGCCAGGTGAGCTGAGCCTCAGCAGTCCCGGCCACTGTCC
 CCATCGGGCATCAAGAGCAGTCCAGTATTACCCCTCATTCCCAGCAACCCTCGTCGGAGAGCTGCAG
 ATGGTGGCTGGCAGATACTCAGCCGAAGAAGTCCGGAAGTTCGGCTGGTCTCCCTTCTCGGTGTA
 TCCGCCAGCTCAGGTGACAGCTACAGCAGGGATGCTGCAGCCTACCCCTCCGCCAAGACCCCCAGCAGC
 GCTTACCCCTCCCTTCTACGTGGCAGATGGCAGCCTGCACCCATCAGCTGAGCTCTGGAGTACGCCTA
 GCCAGGTGGGCTTTGGGCCATGCTAGGTGACGGCTTCCCCTCTGCCCTTGACCCGGCAGCAGCTC
 CGTGGGCAGTGGTACCTTTGGGGCCTCCAGCAGCAGGATCGCATGGGCTACCAGCTGCATGGATCTGAG
 GTTAATGGCTCGCTCCAGCTGTATCCAGCTTTTCGGCTGCCCTGGCACTTACAGTGGGACTTCCGGCC
 ACACGCCCCCTGTGAGTGGGGCCGACGTGAAAGCCTCTAGGCACCCGAGGGACTACAGCCAGCAGCTC
 AGGGATGCCCTTGGGAAGGCACTGGCTCGATCTACTCCCGGATCACTCCAGCAATAATTTCTCACCT
 AGCCCCCAACGCCTGTGGTTCACCCAGGGCCTGCCAGGACATCACAGTGGCCCCGGCAGGAGCGC
 CCAGTGCCTTATCCCCAACTACGATGCAAGTCTCCATGGCCTGAGCAAGATGGAGGACCGCTTGGACGA
 GGCCATCCATGTCTGCGAAGCCACGCTGTTGGCACCGCTAGCGATCTCCATGGGCTTTTGCCTGGCCAT
 GCGCACTGACCAAGGCTTACCCGCCCCATGCTACTGGGCGGGCGCATGCCGCTGGTGGGGGAA
 GCCATCTGAGGAGGGCCTCACAGTGGGGCCAGTCTTTTGCATAACCATGCCAGCCTCCCAGCCAGCC
 CAGTTCCTCCCTGACCTCTCACAGAGCCTCCCGACTCTATAGTGGACTCGGGAGGGCAGGCACAACA
 GCGGGTGCACGAGATCAAGCGGGAGGAGAAAGAGGATGAGGAAATCGCATCAGTAGCCGACGCCGAAG
 AGGACAAGAAGGACCTGAAGTCCCACGCACGCGCACCAGCCAGACGAGGACGAGGACGACCTTCTCCC
 CCCAGAGCAGAAGCGGAGCGGGAGAAGGAGCGCCGGTGGCCAATAATGCCGAGAGCGCTGCGGGTC
 CGCGACATCAATGAGGCCTTAAGGAGCTCGGCCGATGTGCCAGCTGCACCTCAGCAGCGAGAAGCCGC
 AGACCAAAGTGCATCCTGCACCAAGCCGTGGCCGTATCCTCAGCCTGGAGCAGCAGGTGCGGAGAACG
 CAACCTGAACCCAAAGCAGCCTGCTTGAAGCGGAGGGAGGAGGAGAAGGTGTCTGGCGTGGTGGGGAC
 CCACAGCTGGCCCTGTCAGCCGCCACCCGGGCTGGGTGAGGCCACAACCCAGCCGGGCACCTG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG225778 representing NM_001164148
 Red=Cloning site Green=Tags(s)

MMNQSQRMAPVGSDELSDLLDFSMFPLPVANGKSRPASLGGTQFAGSGLEDRPSSGWSGSSDQNSSSF
 DPSRTYSEGAHFSDSHSLPPSTFLGAGLGGKGSERNAYATFGRDTSVGTLSQAGFLPGELSLSSPGPLS
 PSGIKSSQYYPFSPNRRRAADGGLADTQPKKVRKVPPGLPSSVYPPSSGDSYSRDAAYPSAKTPSS
 AYPSPFYVADGSLHPSAELWSTPSQVGFPM LGDSSPLPLAPGSSSVGSGTFGLLQQQDRMGYQLHGSE
 VNGSLPAVSSFSAAPGTYSGTSHTPPVSGAAESLLGTRGTTASSSGDALGKALASIYSPDHSSNFPSP
 SPSTPVGSPQGLPGTSQWPRAGAPSALSPNYDAGLHGLSKMEDRLDEAIHVLRSHAVGTASDLHGLLPGH
 GALTTSTFTGPMSLGGRHAGLVGGSHPEEGLTSGASLLHNHASLPSQSSLPDLQRPPDSYSGLGRAGTT
 AGASEIKREEKEDEEIASVADAEDKDLKVPRTTRSPDEDEDDLPEEQKAEREKERRVANNARERLRV
 RDINEAFKELGRMCQLHLSSEKPTKLLILHQAVAVILSLEQQVRERNLNPKAACLKRREEEKVSGVVG
 PQLALSAHPGLGEAHPAGHL

TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



ACCN: NM_001164148

ORF Size: 1956 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_001164148.2](#)

RefSeq Size: 3317 bp

RefSeq ORF: 1959 bp

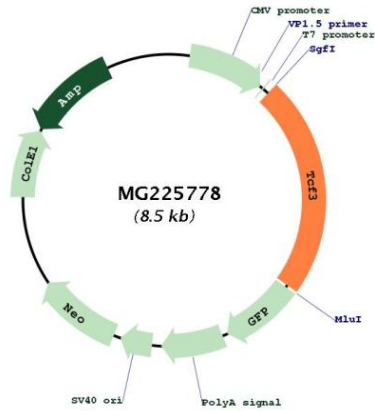
Locus ID: 21423

UniProt ID: [P15806](#)

Cytogenetics: 10 39.72 cM

Gene Summary: Transcriptional regulator. Involved in the initiation of neuronal differentiation. Heterodimers between TCF3 and tissue-specific basic helix-loop-helix (bHLH) proteins play major roles in determining tissue-specific cell fate during embryogenesis, like muscle or early B-cell differentiation. Dimers bind DNA on E-box motifs: 5'-CANNTG-3'. Binds to the kappa-E2 site in the kappa immunoglobulin gene enhancer. Binds to IEB1 and IEB2, which are short DNA sequences in the insulin gene transcription control region.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG225778