

Product datasheet for **MR225780**

Tcf3 (NM_001164149) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tcf3 (NM_001164149) Mouse Tagged ORF Clone
Tag:	Myc-DDK
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-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>MR225780 representing NM_001164149
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGATGAACCACTCTCAGAGAATGGCACCCGTGGGCTCTGACAAGGAAGTGAAGTACCTCCTGGACTTCA
GCATGATGTTCCCGCTACCTGTGGCCAATGGGAAGAGCCGGCCCGCTCCCTCGGGGAACCCAGTTTGC
AGGCTCAGGACTGGAGGACCGACCCAGCTCAGGCTCCTGGGGCAGCAGTGACCAGAACAGTTCTTCTTT
GACCTAGCCGGACATACAGCGAAGGTGCCACTTCAGTGACTCCACAGCAGCCTGCCGCCTTCCACGT
TCCTAGGAGCTGGGCTTGGAGGCAAGGGCAGTGAGCGAATGCCTATGCCACCTTTGGGAGAGACCCAG
TGTTGGCACCTTGAGTCAGGCTGGCTTCTGCCAGGTGAGCTGAGCCTCAGCAGTCCCGGCCACTGTCC
CCATCGGGCATCAAGAGCAGTCCAGTATTACCCCTCATTCCCAGCAACCCTCGTCGGAGAGCTGCAG
ATGGTGGCCTGGCAGATACTCAGCCGAAGAAGTCCGGAAGTTCGGCTGGTCTCCCTTCTCGGTGTA
TCCGCCAGCTCAGGTGACAGCTACAGCAGGGATGCTGCAGCCTACCCCTCCGCCAAGACCCCCAGCAGC
GCTTACCCCTCCCTTCTACGTGGCAGATGGCAGCCTGCACCCATCAGCTGAGCTCTGGAGTACGCCTA
GCCAGGTGGGCTTTGGGCCATGTAGGTGACGGCTTCCCCTCTGCCCTTGACCCGGCAGCAGCTC
CGTGGGCACTGGTACCTTTGGGGCCCTCCAGCAGCAGGATCGCATGGGCTACCAGCTGCATGGATCTGAG
GTTAATGGCTCGCTCCAGCTGTATCCAGCTTTTCGGCTGCCCTTACAGTGGGACTTCCGGCC
ACACGCCCCCTGTGAGTGGGGCCGAGCTGAAAGCCTCTAGGCACCCGAGGGACTACAGCCAGCAGCTC
AGGGGATGCCCTTGGGAAGGCACTGGCCTCGATCTACTCCCCGGATCACTCCAGCAATAATTTCTCACCT
AGCCCCCAACGCCTGTGGGTTACCCAGGGCCTGCCAGGACATCACAGTGGCCCCGGGCAGGAGCGC
CCAGTGCCTTATCCCCAACTACGATGCAGGTCTCCATGGCCTGAGCAAGATGGAGGACCGCTTGGACGA
GGCCATCCATGTCTGCGAAGCCACGCTGTTGGCACCGCTAGCGATCTCCATGGGCTTTTGCCTGGCCAT
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CAGTTCCTCCCTGACCTCTCACAGAGACCTCCCGACTCCTATAGTGGACTCGGGAGGGCAGGCACAACA
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AGGACAAGAAGGACCTGAAGTCCCACGCACGCGCACCAGCCAGACGAGGACGAGGACGACCTTCTCCC
CCCAGAGCAGAAGGCGGAGCGGGAGAAGGAGCGCCGGTGGCCAATAATGCCGAGAGCGCCTGCGGGTC
CGCGACATCAATGAGGCCTTAAGGAGCTCGGCCGCATGTGCCAGCTGCACCTCAGCAGCGAGAAGCCGC
AGACAAACTGCTCATCCTGCACCAGGCCGTGGCCGTATCCTCAGCCTGGAGCAGCAGGTGCGGAGAACG
CAACCTGAACCCAAAGCAGCCTGCTTGAAGCGGAGGGAGGAGGAGAAGGTGTCTGGCGTGGTCGGGGAC
CCACAGCTGGCCCTGTCAGCCGCCACCCGGGCCTGGGTGAGGCCACAACCCAGCCGGGCACCTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR225780 representing NM_001164149
 Red=Cloning site Green=Tags(s)

MMNQSQRMAPVGSDELSDLLDFSMFPLPVANGKSRPASLGGTQFAGSGLEDRPSSGSSWGSSDQNSSSF
 DPSRTYSEGAHFSDSHSSLPPSTFLGAGLGGKGSERNAYATFGRDTSVGTLSQAGFLPGELSLSSPGPLS
 PSGIKSSSQYYPSPNPRRAADGGLADTQPKKVRKVPPGLPSSVYPPSSGDSYSRDAAAYPSAKTPSS
 AYPSPFYVADGSLHPSAELWSTPSQVGFPM LGDGS SLP LAPGSSSVGSGTFGGLQQQDRMGYQLHGSE
 VNGSLPAVSSFSAAPGTYSGTSGHTPPVSGAAE SLLGTRGTTASSGDALGKALASIYSPDHSSNNFSP
 SPSTPVGSPQGLPGTSQWPRAGAPSALSPNYDAGLHGLSKMEDRLDEAIHVLRSHAVGTASDLHGLLPGH
 GALTTSFTGPMSLGRRHAGLVGGSHPEEGLTSGASLLHNHASLPSQPSSLPDLSQRPPDSYSGLRAGTT
 AGASEIKREEKEDEEIASVADAEEDKDLKVPRTTRTSPDEDEDDLPEQKAEREKERRVANNARERLRV
 RDINEAFKELGRMCQLHLSSEKPTKLLILHQAVAVILSLEQQVRE RNLNPKAACLRREEEKVSGVVG D
 PQLALSAHPGLGEAHPAGHL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

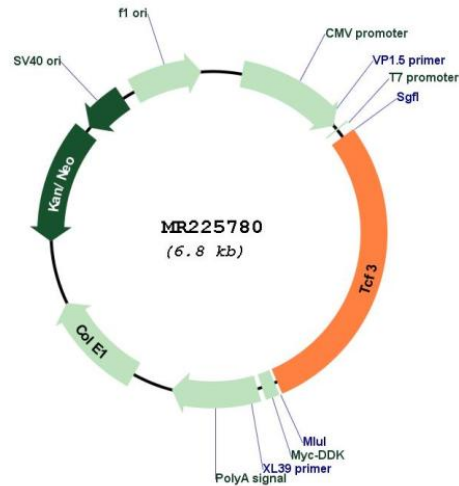
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001164149

ORF Size: 1953 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_001164149.1](#), [NP_001157621.1](#)

RefSeq Size: 3314 bp

RefSeq ORF: 1956 bp

Locus ID: 21423

UniProt ID: [P15806](#)

Cytogenetics: 10 39.72 cM

MW: 68.2 kDa

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]