

Product datasheet for **MR225789**

Tcf3 (NM_001164153) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tcf3 (NM_001164153) 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
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>MR225789 representing NM_001164153
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGATGAACCACTCTCAGAGAATGGCACCCGTGGGCTCTGACAAGGAAGTGAAGTACCTCCTGGACTTCA
 GCATGATGTTCCCGCTACCTGTGGCCAATGGGAAGAGCCGGCCCGCTCCCTCGGGGAACCCAGTTTGC
 AGGCTCAGGACTGGAGGACCGACCCAGCTCAGGCTCCTGGGGCAGCAGTACCAGAACAGTTCTTCTTT
 GACCTAGCCGGACATACAGCGAAGGTGCCACTTCAGTACTCCACAGCAGCCTGCCGCTTCCACGT
 TCCTAGGAGTGGGCTTGGAGGCAAGGGCAGTGAAGGAAATGCCTATGCCACCTTTGGGAGAGACCCAG
 TGTTGGCACCTTGAAGTCAAGGCTGGCTTCCCTGCCAGGTGAGCTGAGCCTCAGCAGTCCCGGCCACTGTCC
 CCATCGGGCATCAAGAGCAGTCCAGTATTACCCCTCATTCCCAGCAACCCTCGTGGAGAGCTGCAG
 ATGGTGGCTGGATACTCAGCCGAAGAAGTCCGGAAGTTCCGCTGGTCTCCCTTCTCGGTGTATCC
 GCCCAGCTCAGGTGACAGCTACAGCAGGATGCTGCAGCCTACCCCTCCGCAAGACCCAGCAGCGCT
 TACCCCTCCCTTCTAGTGGCAGATGGCAGCCTGCACCATCAGCTGAGCTCTGGAGTACGCCTAGCC
 AGGTGGGCTTTGGGCCATGCTAGGTGACGGCTTCCCTCTGCCCCTGCACCGGGCAGCAGCTCCGT
 GGGCAGTGGTACCTTTGGGGCTCCAGCAGCAGGATCGCATGGGCTACCAGCTGCATGGATCTGAGGTT
 AATGGCTCGTCCAGCTGTATCCAGCTTTTCGGCTGCCCTGGCACTTACAGTGGGACTTCCGGCCACA
 CGCCCCGTGTGAGTGGGGCCGAGCTGAAAGCCTCCTAGGCACCCGAGGGACTACAGCCAGCAGCTCAGG
 GGATGCCCTTGGGAAGGCACTGGCTCGATCTACTCCCGGATCACTCCAGCAATAATTTCTCACCTAGC
 CCCTCAACGCCTGTGGGTTACCCAGGGCTGCCAGGGACATCACAGTGGCCCCGGGCAGGAGCGCCCA
 GTGCCTTATCCCCAACTACGATGCAGGTCTCCATGGCTGAGCAAGATGGAGGACCGCTTGGACGAGGC
 CATCCATGTCCTGCGAAGCCACGCTGTTGGCACCCTAGCGATCTCCATGGGCTTTTGCCTGGCCATGGC
 GCACTGACCACGAGCTTACCGGCCCATGTCAGTGGGGGGCGGCATGCCGGCTGGTCCGGGGGAAGCC
 ATCCTGAGGAGGGCTCACAAGTGGGGCAGTCTTTTGCATAACCATGCCAGCCTCCCAGCCAGCCAG
 TTCCCTCCCTGACCTCTCACAGAGACCTCCCGACTCCTATAGTGGACTCGGGAGGGCAGGCACAACAGCG
 GGTGCCAGCGAGATCAAGCGGGAGGAGAAAGAGGATGAGGAAATCGCATCAGTAGCCGACGCCGAAGAGG
 ACAAGAAGGACCTGAAGTCCCACGCACGCGCACCAGCAGTACAGATGAGGTGCTGTCCCTGGAGGAGAA
 GGACCTGAGGGACCGGGAGAGCGTATGGCCAATAACGCTCGGGAGCGGGTGCCTGCGGGACATTAAC
 GAGGCCTTCCGGAGCTGGGCCCATGTGCCAGCTGCACCTCAAGTCGGATAAGGCGCAGACCAAGCTGC
 TCATCCTGCAGCAGGCGGTGCAGGTTCCTGGGCTGGAGCAGCAGGTGCGAGAACGCAACCTGAACCC
 CAAAGCAGCCTGCTTGAAGCGGAGGGAGGAGGAGAAGGTGCTGGCGTGGTCCGGGACCCACAGCTGCC
 CTGTACGCGCCACCCGGGCTGGGTGAGGCCACAACCCAGCCGGGCACCTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR225789 representing NM_001164153
 Red=Cloning site Green=Tags(s)

MMNQSQRMAPVGSDELSDLLDFSMFPLPVANGKSRPASLGGTQFAGSGLEDRPSSGSWSSDQNSSSF
 DPSRTYSEGAHFSDSHSSLPPSTFLGAGLGGKGSERNAYATFGRDTSVGTLSQAGFLPGELSLSSPGPLS
 PSGIKSSSQYYPSFSPNRRRAADGGLDTQPKKVRKVPPGLPSSVYPPSSGDSYSRDAAYPSAKTPSSA
 YPSPFYVADGSLHPSAELWSTPSQVGFPGMLGDGSSPLPLAPGSSSVGSGTFGGLLQQDRMGYQLHGSEV
 NGS LPAVSSFSAAPGTYSGHTPPVSGAAE SLLGTRGTTASSSGDALGKALASIYSPDHSSNNFSPS
 PSTPVGSPQGLPGTSQWPRAGAPSALSPNYDAGLHGLSKMEDRLDEAIHVL RSHAVGTASDLHGLLPGHG
 ALTTSFTGPM SLGGRHAGLVGGSHPEEGLTSGASLLHNHASLPSQPSSLPDL SQRPPDSYSGLRAGTTA
 GASEIKREEKEDEEIASVADA EEDKDKLVPRTRTSSTDEVLSLEEKDLRDRERRMANNARERVRVDIN
 EAFRELGRMCQLHLKSDKAQTKLLILQQAVQVILGLEQQVRE RNLNPKAACLRREEEKVSGVVGDPQLP
 LSAHPGLGEAHNPAGHL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

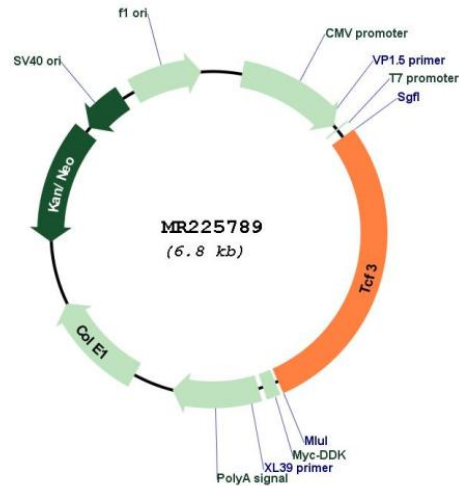
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001164153

ORF Size: 1944 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_001164153.1](#), [NP_001157625.1](#)

RefSeq Size: 3305 bp

RefSeq ORF: 1947 bp

Locus ID: 21423

Cytogenetics: 10 39.72 cM

MW: 67.9 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]