

## Product datasheet for **MC220077**

### **Tcf3 (NM\_001164147) Mouse Untagged Clone**

#### **Product data:**

<b>Product Type:</b>	Expression Plasmids
<b>Product Name:</b>	Tcf3 (NM_001164147) Mouse Untagged Clone
<b>Tag:</b>	Tag Free
<b>Symbol:</b>	Tcf3
<b>Synonyms:</b>	A1; AA408400; ALF2; AW209082; bHLHb21; E2A; E12; E12/E47; E47; KA1; ME2; Pan1; Pan2; TCF-3; Tcfe2a
<b>Vector:</b>	pCMV6-Entry (PS100001)
<b>E. coli Selection:</b>	Kanamycin (25 ug/mL)
<b>Cell Selection:</b>	Neomycin



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Fully Sequenced ORF: >MC220077 representing NM\_001164147  
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGATGAACCACTCTCAGAGAATGGCACCCGTGGGCTCTGACAAGGAAGTGAAGTACCTCCTGGACTTCA  
GCATGATGTTCCCGCTACCTGTGGCCAATGGGAAGAGCCGGCCCGCTCCCTCGGGGAACCCAGTTTGC  
AGGCTCAGGACTGGAGGACCGACCCAGCTCAGGCTCCTGGGGCAGCAGTGACCAGAACAGTTCTTCTTT  
GACCTAGCCGGACATACAGCGAAGGTGCCACTTCAGTGACTCCACAGCAGCCTGCCGCTTCCACGT  
TCCTAGGAGCTGGGCTTGGAGGCAAGGGCAGTGAGCGAATGCCTATGCCACCTTTGGGAGAGACCCAG  
TGTTGGCACCTTGAGTCAGGCTGGCTTCTGCCAGGTGAGCTGAGCCTCAGCAGTCCCGGCCACTGTCC  
CCATCGGGCATCAAGAGCAGTCCAGTATTACCCCTCATTCCCAGCAACCCTCGTCGGAGAGCTGCAG  
ATGGTGGCTGGCAGATACTCAGCCGAAGAAGTCCGGAAGTTCGGCTGGTCTCCCTTCTCGGTGTA  
TCCGCCAGCTCAGGTGACAGCTACAGCAGGGATGCTGCAGCCTACCCCTCCGCCAAGACCCCCAGCAGC  
GCTTACCCCTCCCTTCTACGTGGCAGATGGCAGCCTGCACCCATCAGCTGAGCTCTGGAGTACGCCTA  
GCCAGGTGGGCTTTGGGCCATGCTAGGTGACGGCTTCCCCTCTGCCCTTGCACCGGGCAGCAGCTC  
CGTGGGCACTGGTACCTTTGGGGCCCTCCAGCAGCAGGATCGCATGGGCTACCAGCTGCATGGATCTGAG  
GTTAATGGCTCGCTCCAGCTGTATCCAGCTTTTCGGCTGCCCTTACAGTGGGACTTCCGGCC  
ACACGCCCCCTGTGAGTGGGGCCGAGCTGAAAGCCTCCTAGGCACCCGAGGGACTACAGCCAGCAGCTC  
AGGGGATGCCCTTGGGAAGGCACTGGCCTCGATCTACTCCCCGGATCACTCCAGCAATAATTTCTCACCT  
AGCCCCCAACGCTGTGGGTTACCCAGGGCCTGCCAGGACATCACAGTGGCCCCGGCAGGAGCGC  
CCAGTGCCTTATCCCCAACTACGATGCAGGTCTCCATGGCCTGCAGAGCAAGATGGAGGACCGCTTGG  
CGAGGCCATCCATGTCTGCGAAGCCACGCTGTTGGCACCGCTAGCGATCTCCATGGGCTTTTGCCTGGC  
CATGGCGCACTGACCACGAGCTTACCAGCCCCATGCTACTGGCGGGGGCATGCCGGCTGGTCGGGG  
GAAGCCATCCTGAGGAGGGCCTCACAAGTGGGGCAGTCTTTTGCATAACCATGCCAGCCTCCCCAGCCA  
GCCAGTTCCTCCCTGACCTCTCACAGAGACCTCCGACTCCTATAGTGGACTCGGGAGGGCAGGCACA  
ACAGCGGGTGCCAGCGAGATCAAGCGGGAGGAGAAAGAGGATGAGGAAATCGCATCAGTAGCCGACGCCG  
AAGAGGACAAGAAGGACCTGAAGTCCCACGCACGCGCACCAGCCAGACGAGGACGAGGACGACCTTCT  
CCCCCAGAGCAGAAGGGGAGCGGGAGAAGGAGCGCCGGGTGGCCAATAATGCCGAGAGCGCCTGCGG  
GTCCGCGACATCAATGAGGCCTTAAGGAGCTCGGCCGATGTGCCAGCTGCACCTCAGCAGCGAGAAGC  
CGCAGACCAAACCTGCTCATCCTGCACCAGGCCGTGGCCGTATCCTCAGCCTGGAGCAGCAGGTGCGAGA  
ACGCAACCTGAACCCAAAGCAGCCTGCTTGAAGCGGAGGGAGGAGGAGAAGGTGTCTGGCGTGGTCCGG  
GACCCACAGCTGGCCCTGTACGCCCCACCCGGGCTGGGTGAGGCCCAACCCAGCCGGGCACCTGT  
GA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI  
ACCN: NM\_001164147  
Insert Size: 1962 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](mailto: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](#)

**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\\_001164147.1](#), [NP\\_001157619.1](#)

**RefSeq Size:** 3320 bp

**RefSeq ORF:** 1962 bp

**Locus ID:** 21423

**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] Transcript Variant: This variant (1) encodes the longest isoform (1). Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.