

## Product datasheet for **RC238416**

### TFE3 (NM\_001282142) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	TFE3 (NM_001282142) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TFE3
Synonyms:	bHLHe33; RCCP2; RCCX1; TFEA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC238416 representing NM\_001282142  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGTCGTCATCTTCTTCATCGAGGGTCTTGTCTGCGGCAGCAGCTAATGCGGGCCAGGCGCAGGAGCAGG  
 AGAGGCGTGAGCGTCGGGAACAGGCCGCGCGGCTCCCTTCCCCAGTCTGCACCTGCCTCTCTGCCAT  
 CTCTGTGGTTGGCGTCTCTGCTGGGGGCCACACATTGAGCCGTCCACCCCTGCTCAGGTGCCAGGGAG  
 GTGCTCAAGGTGCAGACCCATCTGGAGAACCAACGCGCTACCACCTGCAGCAGGCGCGCCGGCAGCAGG  
 TGAAACAGTACCTGTCCACCACACTCGGGCCAAAGCTGGCTTCCCAGGCCCTCACCCACCAGGGGGCC  
 CGCAAGTCCCAGCCACTGCCTGCCCTGAGGCTGCCACACTACCGGCCCCACAGGCAGTGCGCCAAC  
 AGCCCCATGGCGTGTCAACATCGGGTCCAGCTCAGAGAAGGAGATTGATGATGTCATTGATGAGATCA  
 TCAGCCTGGAGTCCAGTTACAATGATGAAATGCTCAGCTATCTGCCCGGAGGCACCACAGGACTGCAGCT  
 CCCAGCAGCTGCCTGTGTGAGGAATCTGCTTGTGTACAGTAGTCAAGGCGTGGCCACACCAGCC  
 ATCACTGTCAGCAACTCTGCCAGCTGAGCTGCCAACATCAAACGGGAGATCTCTGAGACCGAGGCAA  
 AGGCCCTTTTGAAGGAACGGCAGAAGAAAGACAATCACAACCTAATTGAGCGTCGAGGCGATTCAACAT  
 TAACGACAGGATCAAGGAAGTGGCACTCTCATCCCTAAGTCCAGTGACCCGGAGATGCGCTGGAACAAG  
 GGCACCATCTGAAGGCCTCTGTGGATTATCCGCAAGCTGCAGAAGGAGCAGCAGCGCTCCAAAGACC  
 TGGAGAGCCGGCAGCGATCCCTGGAGCAGGCCAACCGCAGCCTGCAGTCCGAATTCAGGAACTAGA  
 GCAAGGCCAGATCCATGGCCTGCCAGTACCTCCACTCCAGGGTGTCTTCTTGGCCACGACTTCGGCT  
 TCTGACAGCCTCAAGCCAGAGCAGCTGGACATTGAGGAGGAGGGCAGGCCAGGCGCAGCAACGTTCCATG  
 TAGGGGGGGACCTGCCAGAATGCTCCCATCAGCAGCCCCCTGCACCGCCCTCAGATGCCCTTCTGGA  
 CCTGCACCTTCCAGCGACCACCTGGGGGACCTGGGAGACCCCTTCCACCTGGGGCTGGAGGACATTCTG  
 ATGGAGGAGGAGGAGGGGTGGTGGGAGGACTGTCGGGGGTGCCTGTCCCCACTGCGGGCTGCCTCCG  
 ATCCCCTGCTCTTTCAGTGTCCCTGTGTCTCCAAGGCCAGCAGCCGCGCAGCAGCTTCAGCATGGA  
 AGAGGAGTCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC238416 representing NM\_001282142  
 Red=Cloning site Green=Tags(s)

MSSSSSRVLLRQQLMRAQAQEQERRERREQAAAAPFSPAPASPAISVVGVSAGGHTLSRPPPAQVPRE  
 VLKVVQTHLENPTRYHLQQARRQVKQYLSTTLGPKLASQALTPPPGPASAPLPAPAEAHTTGPTGSAPN  
 SPMALLTIGSSSEKEIDVDVIDEIIISLESSYNDEMLSYLPGGTTGLQLPSTLPVSGNLLDVYSSQGVATPA  
 ITVSNCPAELPNIKREISETAKALLKERQKDNHNLIERRRRFNINDRIKELGTLIPKSSDPEMRWNK  
 GTILKASVDYIRKLQKEQQRSKDLESRQRSLEQANRSLQLRIQELELQAQIHGLPVPPTPGLLSLATTSA  
 SDSLKPEQLDIEEEGRPGAATFHVGGPAQNAHQPPAPPSDALLDLHFPSDHLGDLGDPFHLGLEIDIL  
 MEEEEGVVGLSGGALSPLRAASDPLLSVSPAVSKASSRRSSFMEES

**TR**TRPLEQ**KL**ISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**


**ACCN:** NM\_001282142

**ORF Size:** 1410 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\\_001282142.2](#)

**RefSeq Size:** 3402 bp

**RefSeq ORF:** 1413 bp

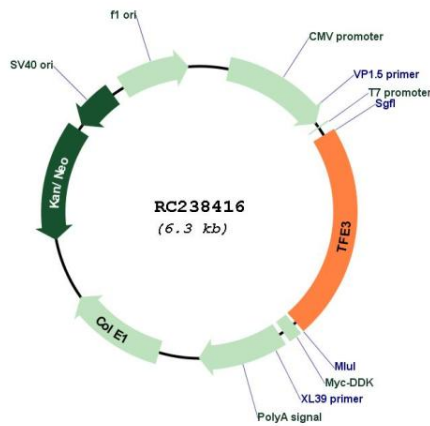
**Locus ID:** 7030

**UniProt ID:** [P19532](#)

**Cytogenetics:** Xp11.23  
**Protein Families:** Druggable Genome, Transcription Factors  
**MW:** 51.1 kDa  
**Gene Summary:**

This gene encodes a basic helix-loop-helix domain-containing transcription factor that binds MUE3-type E-box sequences in the promoter of genes. The encoded protein promotes the expression of genes downstream of transforming growth factor beta (TGF-beta) signaling. This gene may be involved in chromosomal translocations in renal cell carcinomas and other cancers, resulting in the production of fusion proteins. Translocation partners include PRCC (papillary renal cell carcinoma), NONO (non-POU domain containing, octamer-binding), and ASPSCR1 (alveolar soft part sarcoma chromosome region, candidate 1), among other genes. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2013]

**Product images:**



Circular map for RC238416