

Product datasheet for **RC206840**

TFE3 (NM_006521) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TFE3 (NM_006521) 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:

>RC206840 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCTCATGCGGCCGAACCAGCTCGGGATGGCGTAGAGGCCAGCGCGGAGGGCCCTCGAGCCGTGTTCCG
 TGCTGTTGGAGGAGCGCAGGCCGCGGACTCGGCTCAGCTGCTCAGCCTGAACTCTTTGCTTCCGGAATC
 CGGGATTGTTGCTGACATAGAATTAGAAAACTCCTTGATCCTGACAGCTTCTACGAGCTCAAAAGCCAA
 CCCTTACCCTTCGCTCAAGCCTCCAATATACTGCAGGCCACACCAGCCACCCAGCTACACTCTCTG
 CATCGTCTTTCGAGGGGCTCCAGGACCCCTGCCATGTCGTCATCTTCTTCATCGAGGGTCTTGTGCG
 GCAGCAGTAATGCGGGCCAGGCGCAGGAGCAGGAGAGGCGTGAGCGTCGGGAACAGGCCCGCCGGCT
 CCCTTCCCAGTCTGCACCTGCCTCTCCTGCCATCTCTGTGGTGGCGTCTCTGCTGGGGCCACACAT
 TGAGCCGTCCACCCCTGCTCAGGTGCCAGGGAGGTGCTCAAGGTGCAGACCCATCTGGAGAACCCAA
 GCGCTACCACCTGCAGCAGGCGCGCCGCGCAGCAGGTGAAACAGTACCTGTCCACCACACTCGGGCCAA
 CTGGCTTCCCAGGCCCTACCCACCGCCGGGGCCGCAAGTGCCAGCCACTGCCTGCCCTGAGGCTG
 CCCACACTACCGCCCCACAGGAGTGCGCCAACAGCCCCATGGCGCTGCTCACCATCGGGTCCAGCTC
 AGAGAAGGAGATTGATGATGTCATTGATGAGATCATCAGCCTGGAGTCCAGTTACAATGATGAAATGCTC
 AGCTATCTGCCCGGAGGCCACCACAGGACTGCAGCTCCCCAGCAGCTGCCTGTGTGAGGGAATCTGCTTG
 ATGTGTACAGTAGTCAAGGCGTGGCCACACCAGCCATCACTGTCAGCAACTCTGCCAGCTGAGCTGCC
 CAACATCAAACGGGAGATCTCTGAGACCGAGGCAAAGGCCCTTTGAAGGAACGGCAGAAGAAAGACAAT
 CACAACCTAATTGAGCGTCGCAGGCGATTCAACATTAACGACAGGATCAAGGAACCTGGGCACTCTCATCC
 CTAAGTCCAGTGACCCGGAGATGCGCTGGAACAAGGGCACCATCTGAAGGCCTCTGTGGATTATATCCG
 CAAGTGCAGAAGGAGCAGCAGCGCTCCAAGACCTGGAGAGCCGGCAGCGATCCCTGGAGCAGGCCAAC
 CGCAGCCTGCAGCTCCGAATTCAGGAAGTGAAGTGCAGGCCAGATCCATGGCCTGCCAGTGCCTCCCA
 CTCCAGGGCTGCTTCTTGGCCACGACTTCGGCTTCTGACAGCCTCAAGCCAGAGCAGCTGGACATTGA
 GGAGGAGGGCAGGCCAGGCGCAGCAACGTTCCATGTAGGGGGGGACCTGCCAGAATGCTCCCCATCAG
 CAGCCCCCTGCACCGCCCTCAGATGCCCTTCTGGACCTGCACTTTCCAGCGACCACCTGGGGGACCTGG
 GAGACCCCTTCCACCTGGGGCTGGAGGACATTCTGATGGAGGAGGAGGGGGTGGTGGGAGGACTGTC
 GGGGGTGCCTGTCCCCTGCGGGCTGCCTCCGATCCCCTGCTCTTTCAGTGTCCCCTGCTGTCTCC
 AAGGCCAGCAGCCCGCAGCAGCTTACGATGGAAGAGGAGTCC

ACGCGTACGCGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC206840 protein sequence
 Red=Cloning site Green=Tags(s)

MSHAAEPARDGVEASAEGPRAVFLLEERRPADSAQLLSLNSLLPESGIVADIELENVLDPDSFYELKSQ
 PLPLRSSLPIQLPATPATLSASSSAGSRTAMPSSSSSRVLLRQQLMRAQAQEQRERRERREQAAAA
 PFPSPAPASPAISVVGVSAGGHTLSRPPPAQVPREVLKVQTHLENTRYHLQQARRQVQKQYLSTLGP
 LASQALTPPPGPASAQPLPAPEAAHTTGPTGSAPNSPMALLTIGSSSEKEIDDVIDEIIISLESSYNDEML
 SYLPGGTTGLQLPSTLPVSGNLLDVYSSQGVATPAITVSNSCPaelPNIKREISETAKALLKERQKDN
 HNLIERRRRFNINDRIKELGTLIPKSSDPEMRWNKGITLKASVDYIRKLQKEQQRSKDLESRQRLEQAN
 RSLQLRIQELELQAQIHGLPVPPTPGLLSLATTASDSLKPEQLDIEEGRPGAATFHVGGGPAQNAPHQ
 QPPAPSDALLDLHFPSDHLGDLGDPFHLGLEILMEEEEGVVGGLSGGALSPLRAASDPLLSVSPAVS
 KASSRRSSFSMEES

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6238_f08.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_006521

ORF Size: 1725 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_006521.3](#), [NP_006512.2](#)

RefSeq Size: 3467 bp

RefSeq ORF: 1728 bp

Locus ID: 7030

UniProt ID: [P19532](#)

Cytogenetics: Xp11.23

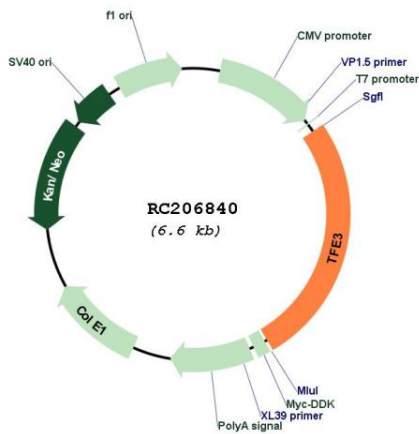
Domains: HLH

Protein Families: Druggable Genome, Transcription Factors

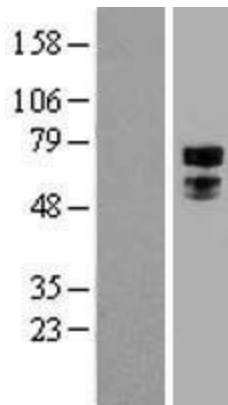
MW: 61.5 kDa

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]

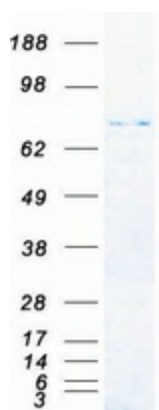
Product images:



Circular map for RC206840



Western blot validation of overexpression lysate (Cat# [LY416587]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206840 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TFE3 protein (Cat# [TP306840]). The protein was produced from HEK293T cells transfected with TFE3 cDNA clone (Cat# RC206840) using MegaTran 2.0 (Cat# [TT210002]).