

Product datasheet for **RC205147**

TEF (NM_003216) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TEF (NM_003216) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TEF
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC205147 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCCGACGCGGGCGGCGAAAGAAGCCGCCTGTGGACCCGACGACAGGACCCGGTCCGGGGCCGGGGC
GCGCAGCTGGGAAAGGGCCTGTCGGGGTCCTTCCCCCTGGTCCTGAAGAAGCTGATGGAGAACCCCC
GCGCGAGGCGCGCCTCGATAAGGAAAAGGGGAAGGAAAAGCTGGAGGAGGACGAGGCCGACGCCCAGC
ACCATGGCTGTCTCAGCCTCCCTCATGCCACCCATCTGGGACAAGACCATCCCATATGATGGCGAATCTT
TCCACCTGGAGTACATGGACCTGGATGAGTTCTGCTGGAGAATGGCATCCCCGCCAGCCCCACCCACCT
GGCCCAACCTGCTGCTGCCTGTAGCAGAGCTAGAAGGGAAGGAGTCTGCCAGCTCTTCCACAGCATCC
CCACCATCCTCCTCCACTGCCATCTTTCAGCCCTCTGAACTGTGTCCAGCACAGAATCTTCCCTGGAGA
AGGAGAGGGAGACTCCAGTCCCATCGACCCCAATTGTGTGGAAGTGGATGTGAACCTCAATCCGGACCC
CGCCGACCTGGTGTCTCCAGTGTGCCAGGCGGGGAGCTTCAACCCTCGGAAGCACAAAGTTTGCTGAG
GAGGACCTGAAGCCCCAGCCTATGATCAAAAAGGCCAAGAAGGTCTTTGTCCCCGACGAGCAGAAGGATG
AAAAGTACTGGACAAGACGCAAGAAGAACAACGTGGCAGCTAAACGGTCACGGGATGCCCGGCGCCTGAA
AGAGAATCAGATCACCATCCGGGCAGCCTTCTGGAGAAGGAGAACACAGCCCTGCGGACGGAGGTGCC
GAGCTACGCAAGGAGGTGGGCAAGTGAAGACCATCGTGTCCAAGTATGAGACCAATACGGGCCCTTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC205147 protein sequence
 Red=Cloning site Green=Tags(s)

MSDAGGGKKPPVDPQAGPGPGGRAAGERGLSGSFPLVLKMLMENPPREARLDKEKGKEKLEDEAAAAAS
 TMAVSASLMPPIDWKTIPYDGESFHLEYMDLDEFLLENGIPASPHLAHNLLLPVALEGKESASSTAS
 PPSSSTAIFQPSETVSSLESSLEKERETPSIDPNCVEVDVNFNPDADLVLSVPGGELFNPRKHKFAE
 EDLKPQPMIKKAKKVFPDEQKDEKYWTRRKNNVAAKRSRDARRLKENQITIRAAFLKENTALRTEVA
 ELRKEVGKCKTIVSKYETKYGPL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6344_b02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_003216

ORF Size: 909 bp

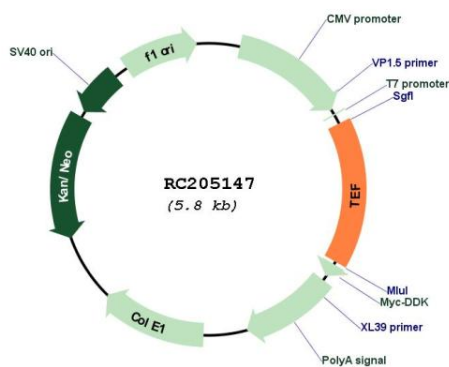
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

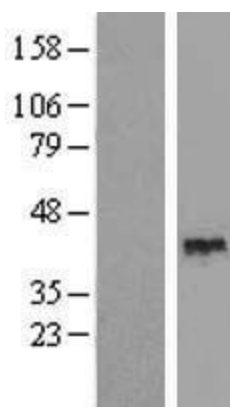
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<ol style="list-style-type: none"> 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_003216.4</u>
RefSeq Size:	4404 bp
RefSeq ORF:	912 bp
Locus ID:	7008
UniProt ID:	<u>Q10587</u>
Cytogenetics:	22q13.2
Protein Families:	Transcription Factors
MW:	33.2 kDa
Gene Summary:	<p>This gene encodes a member of the PAR (proline and acidic amino acid-rich) subfamily of basic region/leucine zipper (bZIP) transcription factors. It is expressed in a broad range of cells and tissues in adult animals, however, during embryonic development, TEF expression appears to be restricted to the developing anterior pituitary gland, coincident with the appearance of thyroid-stimulating hormone, beta (TSHB). Indeed, TEF can bind to, and transactivate the TSHB promoter. It shows homology (in the functional domains) with other members of the PAR-bZIP subfamily of transcription factors, which include albumin D box-binding protein (DBP), human hepatic leukemia factor (HLF) and chicken vitellogenin gene-binding protein (VBP); VBP is considered the chicken homologue of TEF. Different members of the subfamily can readily form heterodimers, and share DNA-binding, and transcriptional regulatory properties. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2012]</p>

Product images:



Circular map for RC205147



Western blot validation of overexpression lysate (Cat# [LY418831]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205147 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).