

## Product datasheet for **RC220164**

### TCF12 (NM\_207036) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	TCF12 (NM_207036) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TCF12
Synonyms:	bHLHb20; CRS3; HEB; HsT17266; HTF4; p64; TCF-12
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>RC220164 representing NM\_207036  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGAATCCCCAGCAACAACGCATGGCCGTATAGGGACCGACAAGGAGCTGAGCGACCTACTGGACTTCA  
GTGCGATGTTTTCCACCTGTTAATAGTGGGAAAAGTACCAACTACACTGGGAAGCAGTCAATTCAG  
TGGATCAGGTATTGATGAAAGAGGAGGTACAACATCTTGGGAACAAGTGGTCAACCAAGTCCTTCTAT  
GATTCTACTAGAGGTTTTACAGACAGCCCTCATTACAGTGATCACTTGAATGACAGTCGATTAGGAGCCC  
ATGAAGGCTTGTCCCAACACCTTTTCACTGAACCTCAAATCTGATGGGAAAAACATCAGAGAGAGGCTCATT  
TTCCCTGTACAGCAGAGATACTGGATTACCAGGCTGTCAATCTAGTCTCCTGAGACAAGATCTGGGGCTT  
GGGAGCCAGCACAGCTATCTTCTTCAGGAAAACCTGGGACAGCATACTATTCATTCTCTGCTACAAGTT  
CCAGGAGGAGACCACTCCATGACTCTGCAGCGCTTGATCCCTTGAAGCAAAAAAAGTCAGAAAGGTGCC  
TCCTGGTTTGCCCTCTTCTGTATATGCACCATCCCAAAATTCAGATGATTTCAACCGTGAATCTCCTAGT  
TATCCATCTCCTAAGCCCAACCAAGTATGTTCCGCTAGCACTTTCTTTATGCAAGATGGGACCCACAATT  
CTTCTGACCTTTGGAGTTCATCAAATGGGATGAGCCAGCCTGGTTTTGGTGGGAATTCTGGGGACCTCCAC  
TTCCACATGTCTCAATCCAGTAGTTATGGCAACCTTCATTACATGACCGCTTGAGTTATCCTCCACAC  
TCAGTTTCACCAACAGACATAAACACGAGTCTTCCACCAATGTCCAGCTTTCATCGCGGCAGTACCAGCA  
GTTACCTTACGTTGCTGCCTCACACACTCCTCCCATCAATGGATCAGACAGCATTCTAGGAACCAGAGG  
GAATGTGCTGGAAGCTCACAGACAGGTGATGCACTTGGAAAGGCTTTGGCATCTATTTATTCTCCTGAC  
CATACCAGCAGTAGTTTTCCGTCAAATCCATCAACACCAAGTGGATCACCTTACCTCTCACAGGTACCA  
GTGATGGCCAAAGACCTGGAGGGCAAGCACCTTCACTCCCAAGCTATGAAAACCTCACTCCCTGAA  
AAATCGAGTTGAGCAGCAACTTACGAGCATTTGCAAGATGCAATGTCTTCTTAAAGGATGTCTGTGAG  
CAGTCTCGAATGGAGGATCGTTTAGACAGACTGGATGATGCAATCCATGTGCTGCGGAACCATGCTGTGG  
GACCTTCCACCAGTTTGCTGCTGGTACAGTGATATACATAGTTTATTGGGACCATCCATAATGCACC  
AATTGGAAGCCTCAATTCAAACTATGGAGGATCAAGCCTTGTGCAAGCAGTCGATCAGCTTCAATGGTT  
GGAACCTCATCGGAAGACTCTGTCAGTCTCAATGGCAATCATTAGTCTGTCTAGTACAGTCACTACTT  
CAAGCACAGACCTGAACCATAAAACACAAGAAAATATAGAGGTGGCTTGCAAAGTCAGTCTGGAAGTGT  
TGTTACAACAGAAATCAAGACTGAAAACAAAGAAAAGGATGAAAACCTTCAAGAACCTCCTTCATCAGAT  
GACATGAAGTCAGATGATGAATCCTCCAAAAAGATATCAAGGTTTCATCTAGAGGCAGAACCAAGCAGTA  
CTAATGAAGATGAGGATTTGAACCCTGAACAGAAGATAGAAAGGAGAAGGAGAGGCGGATGGCTAACAA  
TGCCAGAGAACGCTTACGCGTGCGGGATATTAATGAAGCATTCAAAGAGCTTGGCCGAATGTGTCAGCTT  
CACTTGAAGAGTGAACCAACCAAACTCCTTATTCTTCAAGCCGTGGCAGTCATCCTTAGTC  
TAGAACAGCAAGTCAGAGAGAGGAACCTTAACCCCAAAGCAGCCTGCCTTAAGAGAAGGGGAAGAAAA  
AGTTTCTGCCGTATCGGCAGAGCCGCAACCCACTGCCAGGAACCCATCCTGGGCTTAGTGAAACTACC  
AACCTATGGGTCATATGAGCGGACCG

**AGCGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
TGGATTACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC220164 representing NM\_207036  
 Red=Cloning site Green=Tags(s)

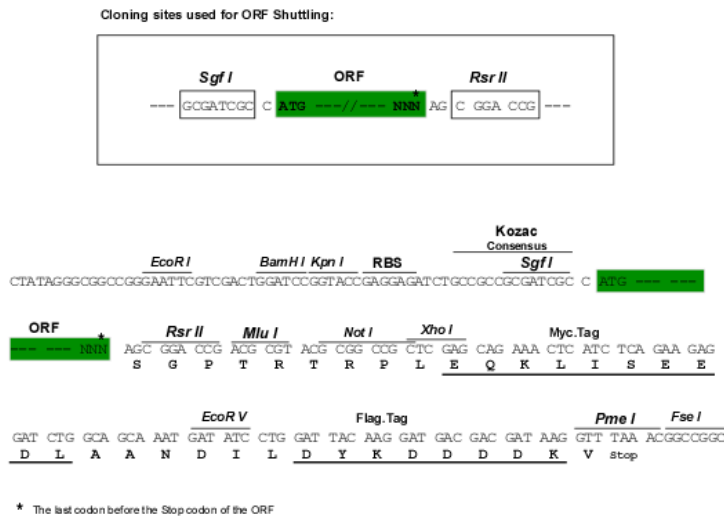
MNPQQQRMAAIGTDKELSDLLDFSAMFSPVNSGKTRPTTLGSSQFSGSGIDERGGTTSWGTSGQPSPSY  
 DSSRGFTDSPHYSDHLNDSRLGAHEGLSPTPFMNSNLMGKTSEKGSFSLYSRDTGLPGCQSSLLRQDLGL  
 GSPAQLSSSGKPGTAYYSFATSSRRRPLHDSAALDPLQAKKVRKVPGLPSSVYAPSPNSDDFNRES  
 YSPKPPPTSMFASTFFMQDGTNNSDLWSSNGMSQPGFGGILGTSTSHMSQSSSYGNLHSHDRLSYPPH  
 SVSPTDIINTSLPPMSSFHRGTSSTSPYVAASHTPPINGSDSILGTRGNAAGSSQTGDALGKALASIYSPD  
 HTSSSFPNPNSTVPGSPSPLTGTSTQWPRPGQAPSPSYENSLHSLKNRVEQQLHEHLQDAMSFVKDyce  
 QSRMEDRLDRLDDAIHVLNRHAVGPSTSLPAGHSDIHSLLGPSHNAIGSLNSNYGGSSLVASSRSAMV  
 GTHREDSVSLNGNHSVLSSTVTTSTDLNHKTQENYRGGLSQSGTVVTEIKTENKEKDENLHEPPSSD  
 DMKSDDESSQKDIKVSRRGRTSSTNEDELNPEQKIEREKERRMANNARERLRVRDINEAFKELGRMCQL  
 HLKSEKPTKLLILHQA VAVILSLEQQVRERNLNPKAACLRREEEKVSAVSAEPPTTLPGTHPGLSETT  
 NPMGHMSGP

SGPTRRRLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6184\\_a10.zip](https://cdn.origene.com/chromatograms/mk6184_a10.zip)

**Restriction Sites:** SgfI-RsrII

**Cloning Scheme:**



**ACCN:** NM\_207036

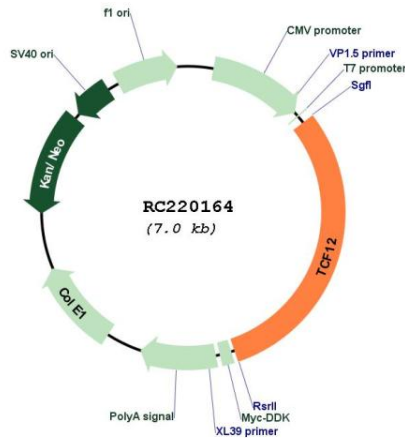
**ORF Size:** 2127 bp

**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](#)

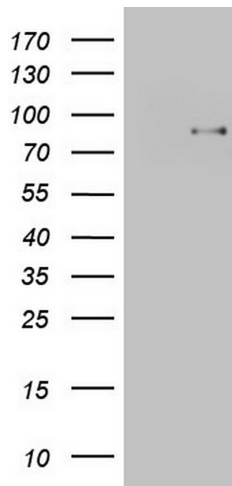
**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u><a href="#">NM_207036.1</a></u> , <u><a href="#">NP_996919.1</a></u>
<b>RefSeq Size:</b>	4796 bp
<b>RefSeq ORF:</b>	2121 bp
<b>Locus ID:</b>	6938
<b>UniProt ID:</b>	<u><a href="#">Q99081</a></u>
<b>Cytogenetics:</b>	15q21.3
<b>Protein Families:</b>	Druggable Genome, Transcription Factors
<b>MW:</b>	75.7 kDa
<b>Gene Summary:</b>	The protein encoded by this gene is a member of the basic helix-loop-helix (bHLH) E-protein family that recognizes the consensus binding site (E-box) CANNTG. This encoded protein is expressed in many tissues, among them skeletal muscle, thymus, B- and T-cells, and may participate in regulating lineage-specific gene expression through the formation of heterodimers with other bHLH E-proteins. Several alternatively spliced transcript variants of this gene have been described, but the full-length nature of some of these variants has not been determined. [provided by RefSeq, Jul 2008]

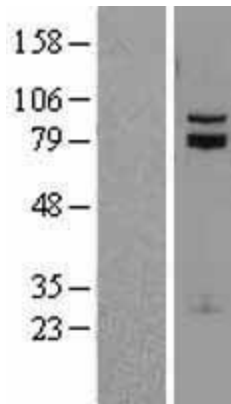
Product images:



Circular map for RC220164



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY TCF12 (Cat# RC220164, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-TCF12 (Cat# [TA804474]). Positive lysates [LY403720] (100ug) and [LC403720] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY403720]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220164 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).