

## Product datasheet for **RC220002**

### TCF21 (NM\_198392) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** TCF21 (NM\_198392) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** TCF21  
**Synonyms:** bHLHa23; POD1  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC220002 representing NM\_198392  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGTCCACCGGCTCCCTCAGCGATGTGGAGGACCTTCAAGAGGTGGAGATGTTGGAATGTGACGGGTTGA  
 AAATGGATTGAACAAGGAATTTGTGACTTCCAACGAGAGCACCGAGGAGAGCTCCAACGCGAGAATGG  
 GTCTCCCCAGAAGGGCCGCGCGGCTGGGCAAGAGGAGGAAGGCGCCACCAAGAAGAGCCCCCTGAGC  
 GGGGTAGCCAGGAGGGGAAGCAGGTCCAGCGCAACGCCGCCAACGCGCAGAGCGGGCCCGCATGCGAG  
 TGCTGAGCAAGGCCTTCTCAGACTCAAGACCACCCTGCCCTGGGTGCCCCCGACACCAAGCTCTCCAA  
 GCTGGACACGCTCAGGCTGGCGTCCAGCTACATCGCCCACTTGAGGCAGATCCTGGCTAACGACAAATAC  
 GAGAACGGGTACATTACCCCGGTCAACCTGACGTGGCCCTTTATGGTGGCCGGGAAACCCGAGAGTGACC  
 TGAAAGAAGTGGTGACCGCGAGCCGCTTATGTGGAACCACCGCGTCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC220002 representing NM\_198392  
 Red=Cloning site Green=Tags(s)

MSTGSLSDVEDLQEVEMLECDGLKMDSNKEFVTSNESTEESNCENGSPQKGRGGLGKRRKAPTKKSPLS  
 GVSQEGKQVQRNAANARERARMVLSKAFSRLKTTLPWVPPDTKLSKLDLRLASSYIAHLRQILANDKY  
 ENGVIHPVNLTWPFMVAGKPESDLKEVVTASRLCGTTAS

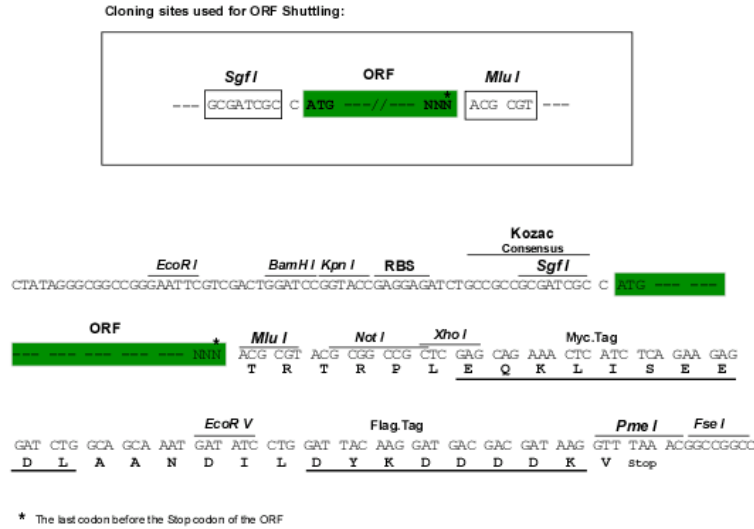
**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6327\\_b12.zip](https://cdn.origene.com/chromatograms/mk6327_b12.zip)


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**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_198392

**ORF Size:** 537 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](#)

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

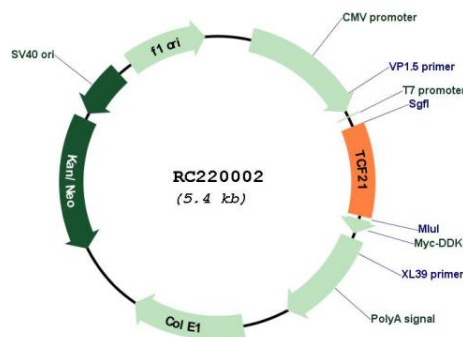
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:**

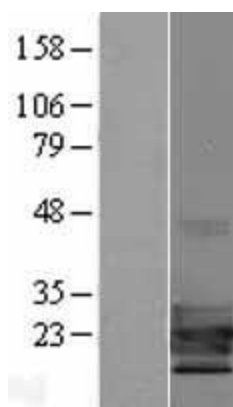
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_198392.3</a>
<b>RefSeq Size:</b>	3231 bp
<b>RefSeq ORF:</b>	540 bp
<b>Locus ID:</b>	6943
<b>UniProt ID:</b>	<a href="#">O43680</a>
<b>Cytogenetics:</b>	6q23.2
<b>Protein Families:</b>	Druggable Genome, Transcription Factors
<b>MW:</b>	19.5 kDa
<b>Gene Summary:</b>	TCF21 encodes a transcription factor of the basic helix-loop-helix family. The TCF21 product is mesoderm specific, and expressed in embryonic epicardium, mesenchyme-derived tissues of lung, gut, gonad, and both mesenchymal and glomerular epithelial cells in the kidney. Two transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Jul 2008]

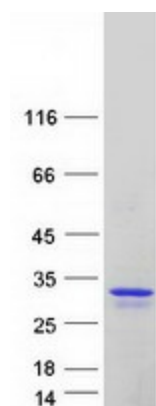
## Product images:



Circular map for RC220002



Western blot validation of overexpression lysate (Cat# [LY405044]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220002 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TCF21 protein (Cat# [TP320002]). The protein was produced from HEK293T cells transfected with TCF21 cDNA clone (Cat# RC220002) using MegaTran 2.0 (Cat# [TT210002]).