

## Product datasheet for **RC233129**

### **TCF4 (NM\_001243226) Human Tagged ORF Clone**

#### **Product data:**

<b>Product Type:</b>	Expression Plasmids
<b>Product Name:</b>	TCF4 (NM_001243226) Human Tagged ORF Clone
<b>Tag:</b>	Myc-DDK
<b>Symbol:</b>	TCF4
<b>Synonyms:</b>	bHLHb19; CDG2T; E2-2; FECD3; ITF-2; ITF2; PTHS; SEF-2; SEF2; SEF2-1; SEF2-1A; SEF2-1B; SEF2-1D; TCF-4
<b>Vector:</b>	pCMV6-Entry (PS100001)
<b>E. coli Selection:</b>	Kanamycin (25 ug/mL)
<b>Cell Selection:</b>	Neomycin



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**ORF Nucleotide  
Sequence:**

>RC233129 representing NM\_001243226  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGTTTTCTAAAAGGCTGGAGAAAAAGCAGAGTGCCTCTCCTCTTTCCCTTCATCTTCATCATTTTGA  
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 AACATGCACCTGGGTTGAGAAGTCTACTCGAGCTTCTCCAGGAGGCCCTTGAGCAAATGTTTTGTAAA  
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 GCCAAGGTTTGTGTATTTGCTAAAATGCATCACCAACAGCAATGGCTGCCTTAGGGACGGACAAAGA  
 GCTGAGTATTTACTGGATTTCACTGCGATGTTTTACCTCCTGTGAGCAGTGGGAAAAATGGACCAACT  
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 CTGGTGGTCTGGGACATGCATGGAATCATTGGACCTTCTCATAATGGAGCCATGGGTGGTCTGGGCTC  
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**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
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**Protein Sequence:** >RC233129 representing NM\_001243226  
Red=Cloning site Green=Tags(s)

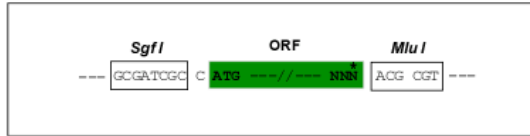
MFSKRLEKIAQVPLLFPFIFIILTNYSKMEGAVESQPSFFKTSQDIVTCTWVENCYSSFSRRPLEQMFCK  
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GLPSSVYAPSASTADYNRDSPGYPSSKPATSTFPSSFFMQDGHHSDDPWSSSSGMNPGYAGMLGNSSHI  
PQSSSYCSLHPHERLSYPSSHSSADINSSLPPMSTFHRSRGTNHYSTSSCTPPANGTDSIMANRSGAAGSS  
QTGDALGKALASIYSPDHTNNSFSSNPSTPVGSPPSL SAGTAVWSRNGGQASSSPNYEGLHSLQSRIED  
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SEDKKLDKDIKSITRSRNNDEDLTPEQKAEREKERRMANNARERLRVRDINEAFKELGRMVQLH  
LKSDKPQTKLLILHQAVAVILSLEQQVRERLNPKAACLKRREEEKVSSEPPPLSLAGPHPGMGDASNHM  
GQM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

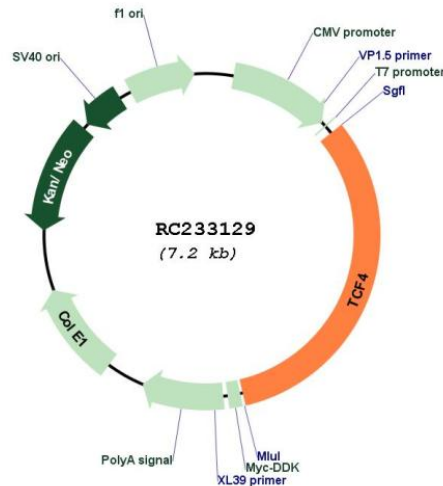
**Restriction Sites:** Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



\* The last codon before the Stop codon of the ORF

**Plasmid Map:**


**ACCN:** NM\_001243226

**ORF Size:** 2319 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.

**RefSeq:** [NM\\_001243226.1](#), [NP\\_001230155.1](#)

RefSeq Size:	8086 bp
RefSeq ORF:	2322 bp
Locus ID:	6925
UniProt ID:	<a href="#">P15884</a>
Cytogenetics:	18q21.2
Protein Families:	Druggable Genome, ES Cell Differentiation/IPS, Transcription Factors
MW:	83.9 kDa
Gene Summary:	<p>This gene encodes transcription factor 4, a basic helix-loop-helix transcription factor. The encoded protein recognizes an Ephrussi-box ('E-box') binding site ('CANNTG') - a motif first identified in immunoglobulin enhancers. This gene is broadly expressed, and may play an important role in nervous system development. Defects in this gene are a cause of Pitt-Hopkins syndrome. In addition, an intronic CTG repeat normally numbering 10-37 repeat units can expand to &gt;50 repeat units and cause Fuchs endothelial corneal dystrophy. Multiple alternatively spliced transcript variants that encode different proteins have been described. [provided by RefSeq, Jul 2016]</p>