

## **Product datasheet for RC224345L4**

#### OriGene Technologies, Inc.

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### TCF4 (NM\_001083962) Human Tagged Lenti ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

Product Name: TCF4 (NM 001083962) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: TCF4

Synonyms: bHLHb19; CDG2T; E2-2; FECD3; ITF-2; ITF2; PTHS; SEF-2; SEF2-1; SEF2-1A; SEF2-1B; SEF2-

1D; TCF-4

Mammalian Cell

Selection:

Puromycin

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

E. coli Selection: Chloramphenicol (34 ug/mL)

**ORF Nucleotide** 

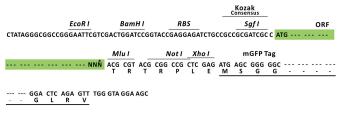
The ORF insert of this clone is exactly the same as(RC224345).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF.

**ACCN:** NM 001083962

ORF Size: 2013 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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> 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. <u>More info</u>

**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:

Cytogenetics:

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:** <u>NM 001083962.1, NP 001077431.1</u>

18q21.2

 RefSeq Size:
 8332 bp

 RefSeq ORF:
 2016 bp

 Locus ID:
 6925

 UniProt ID:
 P15884

**Protein Families:** Druggable Genome, ES Cell Differentiation/IPS, Transcription Factors

**MW:** 71.6 kDa

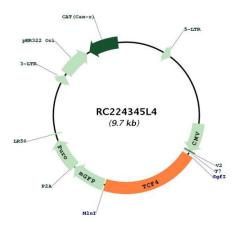
**Gene Summary:** This gene encodes transcription factor 4, a basic helix-loop-helix transcription factor. The

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 >50 repeat units and cause Fuchs endothelial corneal dystrophy. Multiple alternatively spliced transcript variants that encode different proteins have been described.

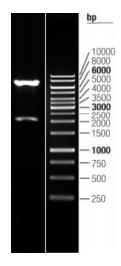
[provided by RefSeq, Jul 2016]



# **Product images:**



Circular map for RC224345L4



Double digestion of RC224345L4 using Sgfl and Mul