

## Product datasheet for RC224290L2

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# TCF7 (NM\_003202) Human Tagged Lenti ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

Product Name: TCF7 (NM\_003202) Human Tagged Lenti ORF Clone

Tag:mGFPSymbol:TCF7Synonyms:TCF-1

Selection:

**Mammalian Cell** 

**Vector:** pLenti-C-mGFP (PS100071)

None

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

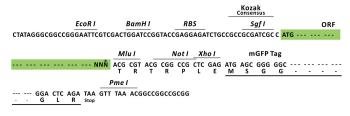
ORF Nucleotide The ORF insert of this clone is exactly the same as(RC224290).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





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

**ACCN:** NM\_003202

ORF Size: 1152 bp



### TCF7 (NM\_003202) Human Tagged Lenti ORF Clone - RC224290L2

**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:** 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 003202.2</u>

 RefSeq Size:
 3283 bp

 RefSeq ORF:
 1155 bp

 Locus ID:
 6932

 UniProt ID:
 P36402

Cytogenetics: 5q31.1

Domains: HMG

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

**Protein Pathways:** Acute myeloid leukemia, Adherens junction, Arrhythmogenic right ventricular

cardiomyopathy (ARVC), Basal cell carcinoma, Colorectal cancer, Endometrial cancer,

Melanogenesis, Pathways in cancer, Prostate cancer, Thyroid cancer, Wnt signaling pathway

MW: 41.4 kDa

**Gene Summary:** This gene encodes a member of the T-cell factor/lymphoid enhancer-binding factor family of

high mobility group (HMG) box transcriptional activators. This gene is expressed

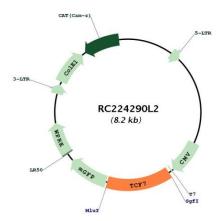
predominantly in T-cells and plays a critical role in natural killer cell and innate lymphoid cell

development. The encoded protein forms a complex with beta-catenin and activates transcription through a Wnt/beta-catenin signaling pathway. Mice with a knockout of this gene are viable and fertile, but display a block in T-lymphocyte differentiation. Alternative splicing results in multiple transcript variants. Naturally-occurring isoforms lacking the N-terminal beta-catenin interaction domain may act as dominant negative regulators of Wnt

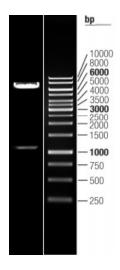
signaling. [provided by RefSeq, Oct 2016]



# **Product images:**



Circular map for RC224290L2



Double digestion of RC224290L2 using Sgfl and Mlul  $\,$