

Product datasheet for **RG227647**

TCF3 / E2A (TCF3) (NM_001136139) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TCF3 / E2A (TCF3) (NM_001136139) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	TCF3 / E2A
Synonyms:	AGM8; bHLHb21; E2A; E47; ITF1; p75; TCF-3; VDIR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG227647 representing NM_001136139
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAACCAGCCGAGAGGATGGCGCCTGTGGGCACAGACAAGGAGCTCAGTGACCTCCTGGACTTCAGCA
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 CCTGAATCCCAAAGCAGCCTGTTTGAACGCGGAGAAGAGGAAAAGGTGTGAGGTGTGGTTGGAGACCC
 CAGATGGTGTTCAGCTCCCCACCCAGGCTGAGCGAAGCCACAACCCCGCCGGGCACATG

ACGCGTACGCGGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG227647 representing NM_001136139
 Red=Cloning site Green=Tags(s)

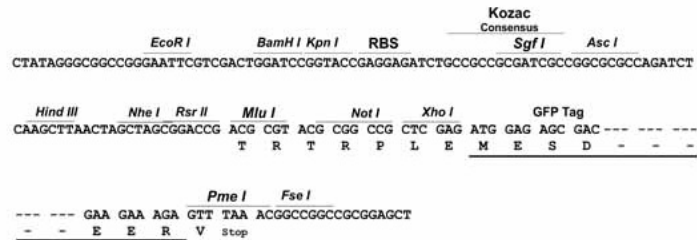
MNQPQRMAPVGTDKELSDLLDFSMMFPLPVTNGKGRPASLAGAQFGGSGLEDRPSSGSWGSQSSSSFD
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 TAAASEIKREEKEDEENTSAADHSEEEKELKAPRARTSSTDEVLSLEEKDLRDRERMANNARERVRV
 DINEAFRELGRMCQMLKSDKAQTKLLILQAVQVILGLEQQVRERNLNPKAACLRREEEKVSGVVGDP
 QMVL SAPHPLSEAHNPAGHM

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



ACCN: NM_001136139

ORF Size: 1953 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.

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_001136139.1](#), [NP_001129611.1](#)

RefSeq Size: 4091 bp

RefSeq ORF: 1956 bp

Locus ID: 6929

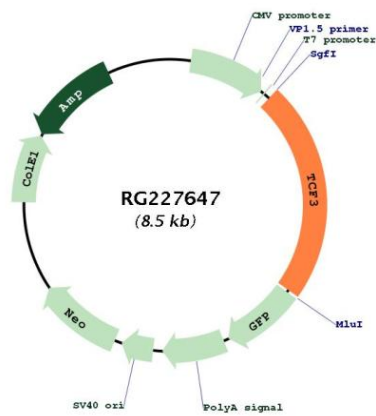
UniProt ID: [P15923](#)

Cytogenetics: 19p13.3

Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Induced pluripotent stem cells, Transcription Factors

Gene Summary: This gene encodes a member of the E protein (class I) family of helix-loop-helix transcription factors. E proteins activate transcription by binding to regulatory E-box sequences on target genes as heterodimers or homodimers, and are inhibited by heterodimerization with inhibitor of DNA-binding (class IV) helix-loop-helix proteins. E proteins play a critical role in lymphopoiesis, and the encoded protein is required for B and T lymphocyte development. Deletion of this gene or diminished activity of the encoded protein may play a role in lymphoid malignancies. This gene is also involved in several chromosomal translocations that are associated with lymphoid malignancies including pre-B-cell acute lymphoblastic leukemia (t(1;19), with PBX1), childhood leukemia (t(19;19), with TFPT) and acute leukemia (t(12;19), with ZNF384). Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene, and a pseudogene of this gene is located on the short arm of chromosome 9. [provided by RefSeq, Sep 2011]

Product images:



Circular map for RG227647