

## Product datasheet for **RG218249**

### FOX E1 (NM\_004473) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	FOX E1 (NM_004473) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	FOX E1
Synonyms:	FKHL15; FOX E2; HFKH4; HFKL5; NMTC4; TITF2; TTF-2; TTF2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG218249 representing NM_004473 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGACTGCCGAGAGCGGGCCGCCGCCGCCGAGCCGGAGGTGCTGGCTACCGTGAAGGAAGAGCGCGGCG  
AGACGGCAGCAGGGCCGGGTCCAGGGGAGGCCACGGGCCGCGGGCGGGCGGGCGCGCCGCAAGCG  
CCCCCTGCAGCGCGGAAGCCGCCCTACAGCTACATCGCGCTCATCGCCATGGCCATCGCGCACGCGCC  
GAGCGCCGCTCAGCTGGCGGCATCTACAAGTTCATCACCGAGCGCTCCCTTCTACCGCGACAACC  
CCAAAAAGTGGCAGAACAGCATCCGCCACAACCTCACACTCAACGACTGTTCTCAAGATCCCGCGCGA  
GGCCGGCCGCCGGTAAGGGCAACTACTGGGCGCTTGACCCAAACGCGGAGGACATGTTGAGAGCGGC  
AGTTCCTGCGCCGCGCAAGCGCTTAAGCGCTCGGACCTCTCCACCTACCCGGCTTACATGCACGACG  
CGGCGGCTGCCGAGCCGCCGCCGCCGCCGCCGCCGCCGCCGCCATCTCCAGGCGCGGTGCCCGC  
CGCGCGCCCCCTACCCGGGCGCGTCTATGCAGGCTACGCGCCGCGCTCGTGGCCGCGCCGCTCCA  
GTCTACTACCCGCGCGTGCAGCGCCCTTCCGCGCTTTCGGCTGGTCTGAGCGCGCGCTCAGCC  
CAGAGCTGGGGCCCGACCGTCCGGGCGCGGCTCTTGCGCTTTGCCTCCGCGCGCCCGCTAC  
CACCACCGGTACCAGCCCGAGGCTGCACCGGGCCCGGCGGCAACCCCTCCGCCTATGCGGCTGCC  
TACGCGGGCCCGACGGCGGTACCCGAGGGCGCGGAGTGGGATCTTTGCCGCTGCTGGCCGCTGG  
CGGGACCGCTTCGCCCCAGCGGGCGGACAGTGGCGCGTGGAGACCACGGTGGACTTACGGGCG  
CACGTCGCGCGGCGAGTTCGGAGCGCTGGGAGCCTGCTACAACCTGGCGGGCAGCTCGGAGGGCCAGT  
GCAGGCGCTACCATGCTCGCCATGCTGCGCTTATCCCGGTGGGATAGATCGGTTCTGTCCGCCATG

**ACGCGT**ACGCGGCGGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG218249 representing NM\_004473  
Red=Cloning site Green=Tags(s)

```
MTAESGPPPPQPEVLATVKEERGETAAGAGVPGTEATGRGAGGRRRKRPLQRGKPPYSYIALIAMIAHAP
ERRLTLGGIYKFI TERFFPYRDNPKKWQNSIRHNLTLNDCFLKIPREAGRPGKGNYPALDPNAEDMFESG
SFLRRRKRFRKSDLSTYPAYMHDAAAAAAAAAAAAAAAAAAIFPGAVPAARPPYPGAVYAGYAPPSLAAPPP
VYYPASPGRVFLVPERPLSPELGPAPSGPGGSCAFASAGAPATTTGYQPAGCTGARPANPSAYAAA
YAGPDGAYPQAGSAIFAAAGRLAGPASPPAGGSSGGVETTVDFYGRTPSPGQFGALGACYNPGGQLGGAS
AGAYHARHAAAAYPGGIDRFV SAM
```

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_004473

**ORF Size:** 1119 bp

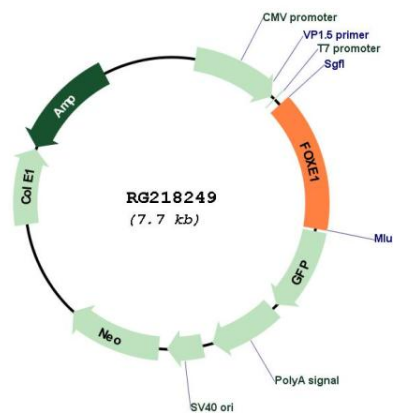
**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of 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\\_004473.4](#)
- RefSeq Size:** 3473 bp
- RefSeq ORF:** 1122 bp
- Locus ID:** 2304
- UniProt ID:** [O00358](#)
- Cytogenetics:** 9q22.33
- Protein Families:** Druggable Genome, Transcription Factors
- Gene Summary:** This intronless gene encodes a protein that belongs to the forkhead family of transcription factors. Members of this family contain a conserved 100-amino acid DNA-binding 'forkhead' domain. The encoded protein functions as a thyroid transcription factor that plays a role in thyroid morphogenesis. Mutations in this gene are associated with the Bamforth-Lazarus syndrome, and with susceptibility to nonmedullary thyroid cancer-4. [provided by RefSeq, Nov 2016]

### Product images:



Circular map for RG218249