

## Product datasheet for **RG220387**

### eRF1 (ETF1) (NM\_004730) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	eRF1 (ETF1) (NM_004730) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	eRF1
Synonyms:	D5S1995; ERF; ERF1; RF1; SUP45L1; TB3-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG220387 representing NM_004730 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGGACGACCCAGTCTGCCGACAGGAACGTGGAGATCTGGAAGATCAAGAAGCTCATTAAGAGCT  
TGGAGGCGGCCCGCGCAATGGCACCAGCATGATATCATTGATCATTCTCCCAAAGACCAGATTTACAG  
AGTGGCAAAAATGTTAGCGGATGAGTTTGAACATGCATCTAACATTAAGTACGAGTAAACCGCCTTTCA  
GTCCTGGGAGCCATTACATCTGTACAACAAAGACTCAAACCTTTATAACAAAGTACCTCCAAATGGTCTGG  
TTGTATACTGTGGAACAATTGTAAACAGAAGAAGGAAAGGAAAAGTCAACATTGACTTTGAACCTTT  
CAAACCAATTAATACGTCATTGTATTTGTGTGACAACAAATTCATACAGAGGCTTTACAGCACTACTT  
TCAGATGATAGCAAGTTTGGATTATTGTAATAGATGGTGTGGTGCACCTTTTGGCACACTCCAAGGAA  
ACACAAGAGAAGTCTGCACAAATTCAGTGTGGATCTCCCAAAGAAACACGGTAGAGGAGGTCAGTCAGC  
CTTGCGTTTTGCCCGTTAAGAAATGAAAAGCGACATAACTATGTTCCGAAAGTAGCAGAGACTGCTGTG  
CAGCTGTTATTTCTGGGACAAAGTGAATGTGGCTGGTCTAGTTTTAGCTGGATCCGCTGACTTTAAAA  
CTGAACTAAGTCAATCTGATATGTTTGATCAGAGGTTACAATCAAAGTTTTAAATAGTTGATATATC  
CTATGGTGGTGAATTAAGGATTCAACCAAGCTATTGAGTTATCTACTGAAGTCTCTCCAACGTGAAATTC  
ATCAAGAGAAGAAATTAATAGGACGATACTTTGATGAAATCAGCCAGGACACGGCAAGTACTGTTTTG  
GCGTTGAAGATACACTAAAGCCTTTGAAATGGGAGCTGTAGAAATTTCTAATAGTCTATGAAAATCTGGA  
TATAATGAGATATGTTCTTATTGCCAAGGCACAGAAGAGGAGAAAATTTCTATCTAACTCCAGAGCAA  
GAAAAGGATAAATCTCATTTACAGACAAAGAGACCGGACAGGAACATGAGCTTATCGAGAGCATGCCCC  
TGTTGGAATGGTTTGCTAACAATAAAAAATTTGGAGCTACGTTGGAATTTGACAGATAAATCACA  
AGAAGGGTCTCAGTTTGTAAAGGATTTGGTGAATTTGGAGGTATCTTCCGGTACCGAGTAGATTTCCAG  
GGAATGGAATACCAAGGAGGAGACGATGAATTTTTGACCTTGATGACTAC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG220387 representing NM\_004730  
 Red=Cloning site Green=Tags(s)

MADDP5AADRNVEIWKIKKLIKSLAARGNGTSMISLIIPPQDQISRVAKMLADEFGTASNIKSRVNRLS  
 VLGAITSVQQRLLKLYNKVPPNGLVYVCGTIVTEEGKEKKVNIDFEPFKPINTSLYLCDNKFHTEAL TALL  
 SDDSKFGFVIDGSGALFGTLQGNTRVHLKFTVDLPKKHGRGGQSALRFARLRMEKRHNYYVRKVAETAV  
 QLFISGDKVNVAGLVLGASADFKTELSQSDMFDQRLQSKVLKLVDSYGGENGFNQAIELSTEVLSNVKF  
 IQEKKLI GRYFDEISQDTGKYCFVEDTLKALEMGAVEILIVYENLDIMRYVLHCQGT EEEKILYLTPEQ  
 EKDKSHFTDKETGQEH EIESMPLLEW FANNYKKGATLEIVTDK SQEGSQFVKFGGGIGGILRYRVD FQ  
 GMEYQGGDDEFFDLDDY

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_004730

**ORF Size:** 1311 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\\_004730.4](#)

**RefSeq Size:** 3653 bp

**RefSeq ORF:** 1314 bp

**Locus ID:** 2107

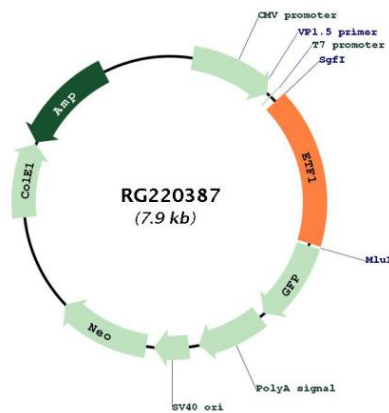
**UniProt ID:** [P62495](#)

**Cytogenetics:** 5q31.2

**Domains:** eRF1\_1, eRF1\_2, eRF1\_3

**Gene Summary:** This gene encodes a class-1 polypeptide chain release factor. The encoded protein plays an essential role in directing termination of mRNA translation from the termination codons UAA, UAG and UGA. This protein is a component of the SURF complex which promotes degradation of prematurely terminated mRNAs via the mechanism of nonsense-mediated mRNA decay (NMD). Alternate splicing results in multiple transcript variants. Pseudogenes of this gene are found on chromosomes 6, 7, and X. [provided by RefSeq, Aug 2013]

### Product images:



Circular map for RG220387