

## Product datasheet for **RG205923**

### ATF1 (NM\_005171) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ATF1 (NM_005171) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ATF1
Synonyms:	EWS-ATF1; FUS/ATF-1; TREB36
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG205923 representing NM_005171 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAAGATCCCACAAGAGTACCACGTCAGAGACAGCACCTCAACCTGGTTCAGCAGTTCAGGGAGCTC  
ACATTTCTCATATTGCTCAACAGGTATCATCTTTATCAGAAAGTGAGGAGTCCCAGGACTCATCCGACAG  
CATAGGCTCCTCACAGAAAGCCACGGGATCCTAGCACGGCGCCCATCTTACAGAAAAATTTGAAAGAC  
TTATCTTCTGAAGATACACGGGGCAGAAAAGGAGACGGAGAAAATCTGGAGTTTCTGCTGCTGCTACTT  
CTATGTCTGTTCCAACCTCCCATCTATCAGACTAGCAGCGGACAGTATATTGCCATTGCCCAAATGGAGC  
CTTACAGTTGGCAAGTCCAGGCACAGATGGAGTACAGGGACTTCAGACATTAACCATGACAAATTCAGGC  
AGTACTCAGCAAGGTACAACATTTCTTTCAGTATGCACAGACCTCTGATGGACAGCAGATACTTGTGCCCA  
GCAATCAGGTGGTCGTACAACTGCATCAGGAGATATGCAAACATATCAGATCCGAACTACACCTTCAGC  
TACTTCTCTGCCACAACTGTGGTGATGACATCTCCTGTGACTCTCACCTCTCAGACAACAAAGACAGAT  
GACCCCAATTGAAAAGAGAAAATAAGGTTAATGAAAAACAGAGAAGCTGCTCGAGAATGTCGCAGAAAAGA  
AGAAAAGATATGTGAAATGCCTGGAAAACCGAGTTGCAGTCTGGAAAATCAAAAATAAACTCTAATAGA  
AGAGTTAAAACTTTGAAGGATCTTTATTCCAATAAAAGTGT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG205923 representing NM\_005171  
 Red=Cloning site Green=Tags(s)

```
MEDSHKSTTSETAPQPGSAVQGAHISHIAQQVSSLSESEESQDSSDSIGSSQKAHGILARRPSYRKILKD
LSSDTRGRKGDGENSGVSAAVTSMVPTPIYQTSSGQYIAIAPNGALQLASPGTDGVQGLQTLTMTNSG
STQQGTTILQYAQTS DGQQILVPSNQVVVQTASGDMQTYQIRTPSATSLPQTVVMTSPVTLTSQTTKTD
DPQLKREIRLMKNREAARECRRKKKEYVKLENRVAVLENQNKTLIEELKTLKDLYSNKS
```

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_005171

**ORF Size:** 813 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\\_005171.2](#), [NP\\_005162.1](#)

**RefSeq Size:** 1568 bp

**RefSeq ORF:** 816 bp

**Locus ID:** 466

**UniProt ID:** [P18846](#)

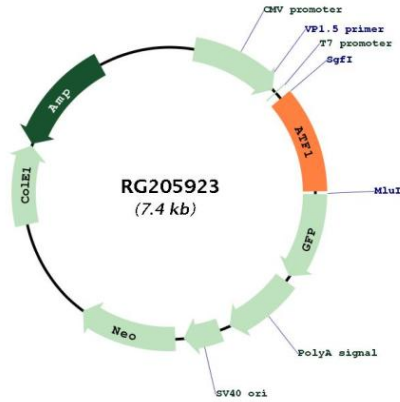
**Cytogenetics:** 12q13.12

**Domains:** pKID, BRLZ

**Protein Families:** Druggable Genome, Transcription Factors

**Gene Summary:** This gene encodes an activating transcription factor, which belongs to the ATF subfamily and bZIP (basic-region leucine zipper) family. It influences cellular physiologic processes by regulating the expression of downstream target genes, which are related to growth, survival, and other cellular activities. This protein is phosphorylated at serine 63 in its kinase-inducible domain by serine/threonine kinases, cAMP-dependent protein kinase A, calmodulin-dependent protein kinase I/II, mitogen- and stress-activated protein kinase and cyclin-dependent kinase 3 (cdk-3). Its phosphorylation enhances its transactivation and transcriptional activities, and enhances cell transformation. Fusion of this gene and FUS on chromosome 16 or EWSR1 on chromosome 22 induced by translocation generates chimeric proteins in angiomatoid fibrous histiocytoma and clear cell sarcoma. This gene has a pseudogene on chromosome 6. [provided by RefSeq, Aug 2010]

Product images:



Circular map for RG205923