

## Product datasheet for **RG231414**

### NFATC4 (NM\_001198965) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	NFATC4 (NM_001198965) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	NFATC4
Synonyms:	NF-AT3; NF-ATC4; NFAT3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RG231414 representing NM\_001198965  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGGGCGGCCAGCTGCGAGGATGAGGAGCTGGAATTTAAGCTGGTGTTCGGGGAGGAAAAGGAGGCC  
 CCCGCTGGGCGCGGGGGATTGGGGGAAGAACTGGACTCAGAGGATGCCCGCCATGCTGCCGTCTGGC  
 CTTGGGAGAGCCCCCTCCCTATGGCGCTGCACCTATCGGTATTCGCCGACCTCCACCCCTCGGCCTGGC  
 ATGCATTCGCCACCGCCGCGACCAGCCCTCACCTGGCACCTGGGAGAGCCAGCCGCCAGGTCGGTGA  
 GGCTGGGAGGACCAGGAGGGGTGCTGGGGTGTGGGGTGGCCGTGTCTCGAGTGTCCAGCATCCG  
 CATCACCTCCATCTCTCCACGCCGAGCCGCCAGCAGCGCTGGAGGACAACCTGATGCCTGGGGGAC  
 GGCTCTCTAGAGATTACCCCCACCAGAAGGCTTTGGGGCTACAGAGAAGCAGGGGGCCAGGGTGGG  
 GGGCTTCTTCAGCCCAAGCCCTGGCAGCAGCAGCTGTCTCGTGGAGCTTCTTCTCCGATGCCTTGA  
 CGAGGCAGCCCTGTATGCAGCCTGCGACGAGGTGGAGTCTGAGCTAAATGAGGCGCCCTCCCGCTTGGC  
 CTGGGCTCCCGCTGCCCTCGCCCCGGGCTCCCTCGGCCATGGACCCCGAAGATCCCTGGAGCCTGT  
 ATGGTCCAAGCCCCGGAGGCCGAGGGCCAGAGGATAGCTGGTACTCCTCAGTGTCTCTGGGCCACCCC  
 AGCCTCCCGCGGCTGCCTCTCCATGTGGCAAGCGGCGTATTCCAGCTCGGGAACCCCATCTTACGCC  
 TCCCCAGCTCTGTCCCGCGTGGCAGCCTGGGGAAAGAGGGGTCTGAGCCACCTCCACCACCCCATTTGC  
 CTCTGGCCCGGGACCCGGGCTCCCTGGTCCCTTTGACTATGTGGGGGCCACCAGCTGAGAGCATCCC  
 TCAGAAGACACGGCGACTTCCAGCGAGCAGGAGTGGCTCTGCCTCGGTCTGAGGAGCCTGCCTCATGC  
 AATGGGAAGTGCCTTTGGGAGCAGAGGAGTCTGTGGCTCCTCCAGGAGGTTCCCGAAGGAGGTGGCTG  
 GCATGGACTACCTGGCAGTGCCTCCCACTCGCTTGGTCCAAGGCCGATTGGGGACACAGCCCTAT  
 CTTCAGGACCTCTGCCCTACCCCACTGGACTGGCCTCTGCCAGCCAATATGAGCAGCTGGAGCTGAGG  
 ATCGAGGTACAGCCTAGAGCCCACCACCGGCCACTATGAGACAGAAGGCAGCCGTGGAGCTGTCAAAG  
 CTGCCCTGGCGGTACCCCGTAGTCAAGCTCCTAGGCTACAGTGAGAAGCCACTGACCCTACAGATGTT  
 CATCGGCACTGCAGATGAAAGGAACCTGCGGCCTCATGCCTTCTATCAGGTGCACCGTATCACAGGCAAG  
 ATGGTGGCCACGGCCAGCTATGAAGCCGTAGTCAAGTGGCACCAAGGTGTTGGAGATGACTCTGCTGCCTG  
 AGAACAACATGGCGCCAACATTGACTGCGCGGAATCCTGAAGCTTCGGAATTCAGACATTGAGCTTCG  
 GAAGGGTGAAGACGACATCGGGCGAAAAACACACGTGTACGGCTGGTGTCCGGGTACACGTGCCCCAG  
 GCGGGCGGAAGGTCTCTCAGTACAGGCAGCATCGGTGCCATCGAGTGTCCAGCGCTCAGCCAGG  
 AGCTGCCCCAGGTGGAGGCTACAGCCCAGTGCCTGCTGTGAGAGGAGGCGAGGAACCTGACTGAC  
 TGGCTCCAATTCCTGCCAGACTCCAAGGTGGTGTTCATTGAGAGGGTCTGATGGGAAGCTGCAATGG  
 GAGGAGGAGGCCACAGTGAACCGACTGCAGAGCAACGAGGTGACGCTGACCCTGACTGTCCCGAGTACA  
 GCAACAAGAGGGTTTCCCGCCAGTCCAGGTCTACTTTTATGTCTCCAATGGGCGGAGGAAACGCAGTCC  
 TACCCAGAGTTTCAGGTTTCTGCCTGTGATCTGCAAGAGGAGCCCTACCGACTCATCTCTGCGGGT  
 TTCCCTCAGCATCGGCAACCCCTTTGGCACTGACATGGACTTCTACCACCCAGGCCCCCTACCCCT  
 CCTATCCCATGAAGACCCTGCTTGCAGAACTCCTTACCTATCAGAAGGCTTCGGCTATGGCATGCCCC  
 TCTGTACCCCGAGACGGGGCCCCACCATCCTACAGACCGGCCCTGCGGATGTTCCCTGAGACTAGGGGT  
 ACCACAGTGAGTGAGATCATTGGCCGAGACCTGAGTGGCTCCCTGCACCTCTGGAGAAGAGCCTCCTG  
 CC

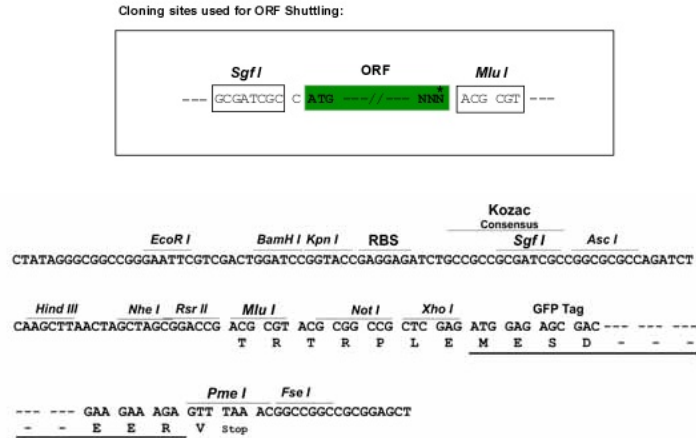
**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG231414 representing NM\_001198965  
 Red=Cloning site Green=Tags(s)

```
MGAASCEDEEELFKLVFGEEKEAPPLGAGGLGEELDSEDAPPCCRLALGEPPPYGAAPIGIPRPPPPRPG
MHSPPPRPAPSPGTWESQPARSVRLGGPGGGAGGAGGGRVLECPISIRITSIPTPEPPAALEDNPDWGD
GSPRDYPPPEFGGGYREAGGQGGGAFFSPSPGSSSLSSWSFFSDASDEAALYAACDEVESELNEAASRFG
LGSPLSPRASRPWPTEDPWSLYGSPGGRGPEDSWLLL SAPGPTPASPRPASPCGKRRYSSSGTPSSA
SPALSRRGSLGEEGSEPPPPPLPLARDPGSPGPFDYVGAPPAESIPQKTRRTSSEQAVALPRSEEPASC
NGKLPLGAEESVAPPGGSRKEVAGMDYLAVPSPLAWSKARIGGHSPIFRTSALPPLDWPLPSQYEQLELR
IEVQPRAHHRAHYETEGSRGAVKAAPGGHPVVKLLGYSEKPLTLQMFIGTADERNLRPHAFYQVHRITGK
MVATASYEAVVSGTKVLEMTLLPENNMAANIDCAGILKLRNSDIELRKGETDIGRKNTRVRLVFRVHVPQ
GGGKVVSVQAASVPIECSQRSAQELPQVEAYSPSACSVRGGEELVLTGSNFLPDSKVVFIERGPDGKLQW
EEEATVNRLQSNEVTLTLTVPEYSNKRVSRPVQVYFYVSNRRKRSTQSFRLPVICKEEPLPDSLRG
FPSASATPFGTDMDFSPRRPPYPSYPHEDPACETPYLSEFGYGMPLYPQTGPPPSYRPLRMFPETRG
TTVSEIIGRDLSGFPAPPGEPPA
```

TRTRPLE - GFP Tag - V

**Restriction Sites:** Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_001198965

**ORF Size:** 2382 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\\_001198965.2](#)

**RefSeq Size:** 4652 bp

**RefSeq ORF:** 2385 bp

**Locus ID:** 4776

**UniProt ID:** [Q14934](#)

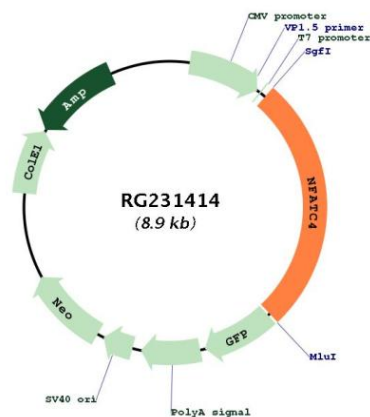
**Cytogenetics:** 14q12

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

**Protein Pathways:** Axon guidance, B cell receptor signaling pathway, MAPK signaling pathway, Natural killer cell mediated cytotoxicity, T cell receptor signaling pathway, VEGF signaling pathway, Wnt signaling pathway

**Gene Summary:** This gene encodes a member of the nuclear factor of activated T cells (NFAT) protein family. The encoded protein is part of a DNA-binding transcription complex. This complex consists of at least two components: a preexisting cytosolic component that translocates to the nucleus upon T cell receptor stimulation and an inducible nuclear component. NFAT proteins are activated by the calmodulin-dependent phosphatase, calcineurin. The encoded protein plays a role in the inducible expression of cytokine genes in T cells, especially in the induction of interleukin-2 and interleukin-4. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2014]

### Product images:



Circular map for RG231414

