

## Product datasheet for **RG226608**

### NFATC4 (NM\_001136022) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	NFATC4 (NM_001136022) 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)



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**ORF Nucleotide Sequence:**

>RG226608 representing NM\_001136022  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGATAACCACCCTCCCATCTCTCTACCCGCCAGCCTCGCCAGTATCTCCACCAGTACGAATCTCC  
 CATCTAACTCCCTCTCACACAACCAGGCTCTCCAAGCCTGACTTCCCGGAAACTCCAGTCCAGGTCT  
 TCCTTCTCTCCAGCCAGGCCGGGACCTGGGGCTCCTGCCGATCCATGGGGCGGCCAGTCCGAG  
 GATGAGGAGCTGGAATTTAAGCTGGTGTTCGGGGAGGAAAAGGAGGCCCGCCCGTGGGCGGGGGGAT  
 TGGGGGAAGAACTGGACTCAGAGGATGCCCGCCATGCTGCCGTCTGGCCTGGGAGAGCCCTCCCTA  
 TGGCGTGCACCTATCGGTATCCCGACCTCCACCCCTCGGCCTGGCATGCATTGCCACCGCCGCA  
 CCAGCCCCCTCACCTGGCACCTGGGAGAGCCAGCCGCCAGGTGGTGGGCTGGGAGGACCAGGAGGG  
 GTGCTGGGGTGTGGGGTGGCGTGTCTCGAGTGTCCAGCATCCGCATCACCTCCATCTCTCCAC  
 GCCGAGCCGCCAGCAGCCTGGAGGACAACCTGATGCCTGGGGGACGGCTCTCTAGAGATTACCC  
 CCACCAGAAGGCTTTGGGGCTACAGAGAAGCAGGGGGCCAGGTGGGGGGCCTTCTTACGCCAAGCC  
 CTGGCAGCAGCAGCTGTCTCGTGGAGCTTCTTCTCCGATGCCTCTGACGAGGCAGCCCTGTATGCAGC  
 CTGCGACGAGGTGGAGTCTGAGCTAAATGAGGCGGCCTCCCGCTTGGCCTGGGCTCCCCGCTGCCCTG  
 CCCCAGGCTCCCTCGGCCATGGACCCCGAAGATCCCTGGAGCCTGTATGGTCCAAGCCCGGAGGCC  
 GAGGGCCAGAGGATAGCTGGCTACTCTCAGTGTCTGGGGCCACCCAGCCTCCCCGGGCTGCCTC  
 TCCATGTGGCAAGCGGCTATTCCAGCTCGGGAACCCATCTTACGCTCCCGAGCTGTGCCGCGT  
 GGCAGCTGGGGAGAGGGTCTGAGCCACCTCACCCACCCATTGCCTCTGGCCGGGACCCGGGCT  
 CCCCTGGTCCCTTACTATGTGGGGCCACCCAGCTGAGAGCATCCCTCAGAAGACACGGCGACTTC  
 CAGCGAGCAGGAGTGGCTCTGCCTCGTCTGAGGAGCCTGCCTCATGCAATGGGAAGCTGCCCTTGGGA  
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 TAGTCAAGCTCCTAGGCTACAGTGAGAAGCCACTGACCCTACAGATGTTTCATCGGCACTGCAGATGAAAG  
 GAACCTGCGGCTCATGCCTTCTATCAGGTGCACCGTATCACAGGCAAGATGGTGGCCACGGCCAGCTAT  
 GAAGCCGTAGTCAAGTGGACCAAGGTGTTGGAGATGACTCTGCTGCCTGAGAACAACATGGCGGCAACA  
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 GCGCAAAAACACAGTGTACGGCTGGTGTTCGGGTACACGTGCCCCAGGGCGGGGGAAGGTGCTCTCA  
 GTACAGGCAGCATCGGTGCCATCGAGTGTCCAGCGCTCAGCCAGGAGCTGCCCCAGGTGGAGGCT  
 ACAGCCCCAGTGCCTGCTGTGAGAGGAGGCGGGAAGTGGTACTGACTGGCTCCAACCTCCTGCCAGA  
 CTCCAAGGTGGTGTTCATTGAGAGGGTCTGATGGGAAGCTGCAATGGGAGGAGGAGGCCACAGTGAAC  
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 CAGTCCAGGTCTACTTTTATGTCTCAAATGGGCGGAGGAAACGCAGTCTACCCAGAGTTTCAGGTTTCT  
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 CCCACCATCTACAGACCGGCCTGCGGATGTTCCCTGAGACTAGGGGTACCACAGGTTGTGCCAACCA  
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 CCCCTTCCCTTCCAGAGTGTGATGTCATCCCTACCTGCTGAGGGATAACAATAAGGTAGGGCCAGGCTAT  
 GGCCTGGGAGGGGCTCCGGAGCAGGAGAAATCCAGGGGTGGTACAGCAGCGCTTCCGAGACAGT  
 TCCCTATCCAGGTATCACGCTGGAGGAAGGTGGTGTGGGACTGGGGCTGTGAGTGTGAGTGTGTGCA  
 AGAGATTGCTCTGCATGTTTGC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG226608 representing NM\_001136022  
 Red=Cloning site Green=Tags(s)

MITTLPSLLPASLASISHRVTNLPSNSLSHNPGLSKPDFGNSSPGLPSSSSPGRDLGAPAGSMGAASCE  
 DEELEFKLVFGEEKEAPPLGAGGLGEELDSEDAPPCCRLALGEPPIYGAAPIGIPRPPPPRPMHSPPPR  
 PAPSPTWESQPARSVRLGGPGGGAGGAGGRVLECPISIRITISISPTPEPPAALEDNPDWGDGSPRDYP  
 PPEGFGGYREAGGQGGGAFFSPSPGSSLSWSFFSDASDEAALYAACDEVESELNEAASRFGLGSPLPS  
 PRASPRWTPEDPWSLYGSPGGRGPEDSWLLLSAPGPTPASPRPASPCGKRRYSSSGTPSSASPALSRR  
 GSLGEEGSEPPPPPLPLARDPGSPGPFYVYGAPPAESIPQKTRRTSSEQAVALPRSEEPASCNGKPLPG  
 AEESVAPPGSRKEVAGMDYLAVPSPLAWSKARIGGHSPIFRTSALPPLDWPLPSQYEQLELRIEVQPR  
 HHRAYHETEGSRGAVKAAPGGHPVVKLLGYSEKPLTLQMFIGTADERNLRPHAFYQVHRITGKMOVATASY  
 EAVVSGTKVLEMTLLPENMAANIDCAGILKLRNSDIELRKGETDIGRKNTRVRLVFRVHVPPQGGKVVV  
 VQASVPIECSQSAQELPQVEAYSPSACSVRGGEEVLV TGSNFLPDSKVVFIERGPDGKQWEEETVNV  
 RLQSNVTLTLTVPEYSNKRVS RPVQVYFVYVSNRRKRSP TQSFRLPVICKEEPLDSSLRGFPASAT  
 PFGTDMDFSPRPPYPSPHEDPACETPYLSEGFYGMPLYPQTGPPPSYRPLRMFPETRTGTGCAQP  
 PAVSFLPRPFPSDPYGGGSSFLGLPFSPAPFRPPPLPASPPLGPFPSQSDVHPLPAEYGNKVGPY  
 GPGEGAPEQEKSRRGGYSSGFRDSVPIQGITLEEGCGTGGCECECVQEI ALHVC

TRTRPLE - GFP Tag - V

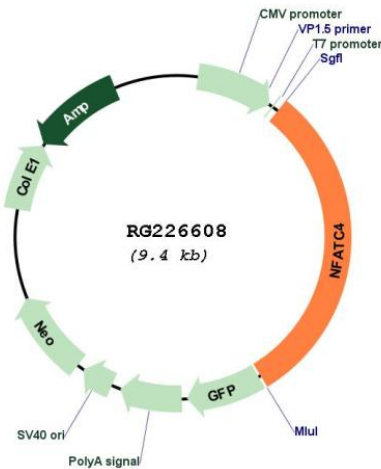
**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



## Plasmid Map:



ACCN: NM\_001136022

ORF Size: 2892 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\\_001136022.2](#)

RefSeq Size: 5672 bp

RefSeq ORF: 2895 bp

Locus ID: 4776

UniProt ID: [Q14934](#)

<b>Cytogenetics:</b>	14q12
<b>Protein Families:</b>	Druggable Genome, Transcription Factors
<b>Protein Pathways:</b>	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
<b>Gene Summary:</b>	<p>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]</p>