

Product datasheet for **RG235309**

NFAT5 (NM_173215) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NFAT5 (NM_173215) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	NFAT5
Synonyms:	NF-AT5; NFATL1; NFATZ; OREBP; TONEBP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG235309 representing NM_173215 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGCGGTGCTTGCAGCTCCTTACCACCTCTCCAGCCCTACCATTTATTCTACCTCAGTCACCGACA
GCAAGGCTATGCAAGTGGAGAGCTGCTCCTCAGCCGTGGGGTAAGTAACAGAGGGGTAAGTAAAAAGCA
GTTAACACAGTAACACAGTTCAGCAGCATCCATCAACACCGAAGAGGCACACAGTCTTGATACATCTACCA
CCACCTGAGGACTTGTGGATAACAGTCGGATGTCCTGCCAGGATGAGGGGTGTGGATTGGAATCTGAGC
AGAGCTGCAGTATGTGGATGGAGGATCCCCCTCCAACCTCAGTAACATGAGCACCAGTCTCTACAATGA
TAACACTGAGGTACCTCGTAAATCACGAAAACGAAATCCAAGCAGAGGCCGGGGTCAAACGACGAGAT
TGTGAAGAATCTAATATGGATATATTTGATGCCGACAGTGCCAAAGCACCTCACTATGTGCTTTCTCAGC
TTACCACGGACAACAAAGGCAACTCAAAGCGGGAAATGGAACATTGGAAAACAAAAAGGAACTGGAGT
AAAGAAGAGCCCTATGTTGTGTGGACAATATCCTGTTAAAAGTGAGGGAAAGGAGCTGAAGATAGTTGTA
CAACCTGAGACACAGCACCGAGCTCGGTACCTGACTGAGGGCAGCCGTGGCTCAGTGAAGATAGAACAC
AGCAAGGCTTTCCTACAGTAAAGCTGGAAGGCCATAATGAACCTGTAGTGTGCAAGTGTGTTGGGCAA
CGACTCTGGACGAGTGAACACATGGATTTTATCAGGCCTGCAGAGTAAGTGGACGAAATACAACCTCCT
TGCAAAGAAGTGGACATTGAAGGCACTACTGTTATAGAAGTCGGCCTTGATCCTAGCAACACATGACAC
TGGCGGTGGACTGCGTAGGGATATTGAAATTGAGGAATGCTGATGTCGAAGCCAGAATAGGAATTGCTGG
TTCCAAGAAGAAAAGCACTCGTGCCAGATTGGTTTTTCGAGTTAATATCATGAGGAAAGATGGCTCCACT
TTGACACTGCAAAACCCCTCTTCTCCAATTTTGTGTAAGTACTCAGCCAGCAGGAGTGCCAGAAATCTTAAAGA
AAAGCTTGCATAGCTGTTTCAGTGAAGGAGAAGAAGAAGTGTGTTTAAATCGGCAAGAAGTCTTCTGAAAGG
AACTAAAGTTATTTTCCAAGAAAATGTTTCTGATGAAAACCTTGGAAAGTCAGAAGCTGAAATTGATATG
GAACTATTTTCATCAGAATCATCTTATTGTGAAGGTTCTCCCTATCATGACCAACATATAACTTTGCCTG
TGTCAGTGGGAATATATGTAGTGACAAAATGCTGGAAGATCTCATGATGTTCAACCATTCACTTACTCC
AGACCCAGCAGCAGCTGGTGCTTTGAATGTAATGTGAAGAAGGAAATATCTAGTCCAGCAAGACCTTGC



[View online »](#)

TCTTTTGAAGAGGCCATGAAAGCAATGAAACTACTGGATGTAATTTAGATAAAGGTAAATATTATCCCTA
ATGCCCTGATGACTCCACTCATACCAAGCAGTATGATTAAGAGTGAAGATGTTACTCCAATGGAAGTAAAC
AGCAGAAAAAAGATCTTCCACTATTTTTAAGACTACAAAGTCTGTTGGATCAACTCAGCAAAACATTAGAA
AACATCTCAAACATAGCAGGAAATGGCTCTTTTTATCACCATCATCTTCCCACCTACCTTCTGAAAATG
AAAAACAGCAGCAGATTCAGCCCAAGGCATACAACCCAGAGACCCTGACAACATTTCAAACCCAGGACAT
CTCACAGCCTGGTACTTTTTCCAGCAGTTTCTGCTTCTAGTCAGCTGCCAACAGCGATGCCTATTGCAG
CAGGCTACACAGTTCAGACAAGAGAAACTCAGTCTAGAGAGATATTACAGTCAGATGGTACAGTGGTTA
ATTTGTACAACCTGACTGAGGCATCACAACAACAGCAGCAGTCACCACTACAAGAACAAGCACAGACTTT
ACAGCAGCAGATTTTCATCAAATATTTTTCCATCACAAAATAGTGTGAGTCAGCTTCAAGAATACTATTTCAG
CAGCTGCAAGCAGGGAGTTTACAGGCAGTACTGCTAGTGGCAGCAGTGGAAAGTGTGACTTGGTCCAAC
AAGTTTTAGAGGCACAGCAGCAGTTATCTTCAGTTTTATTTTCTGCTCCAGATGGTAATGAGAATGTTCA
AGAGCAGCTTAGTGCAGATATTTTTCAACAAGTCAGTCAAATTCAGAGTGGTGAAGCCCTGGAATGTTT
TCCTCAACAGAGCCAACAGTCCATACCAGACCAGATAATTTATTACCTGGAAGAGCTGAAAGTGTTCATC
CACAGTCTGAAAACACGTTATCTAATCAACAGCAGCAGCAGCAGCAGCAACAGCAAGTATGGAATCTTC
AGCCGCAATGGTATGGAGATGCAACAGAGTATCTGCCAGGCAGCTGCCAGATTCAGTCAGAGTATTC
CCTTCAACTGCTTCAGCAAAATGGAACCTTCAGCAATCGCCAGTTTACCAGCAGACTTCTCATATGATGA
GTGCATTGTCTACCAATGAGGATATGCAATGCAGTGTGAATTGTTTTCTTCTCCTCCTGCAGTTTCTGG
AAATGAACTTCTACAACACCACAGCAGGTTGCAACCCCTGGCACTACCATGTTTCAGACATCAAGT
TCAGGAGATGGAGAAGAACTGGAACACAAGCAAAACAGATTCAGAACAGTGTCTTTCAGACCATGGTCC
AAATGCAACATAGTGGGGACAATCAACCTCAAGTTAACCTTTTTTTCATCCAAAAAGTATGATGAGTGT
TCAGAATAGTGGTACCAACAACAAGGTAATGGTTTATTCAGCAAGGGAATGAGATGATGCACCTTCAA
TCTGGAAATTTTTGCAGCAGTCTTCTCATTACAGGCCCAACTTTTTCTCCTCAAAATCCTATTGGCCG
ATGCTCAGAACCTTTCCAGGAACTCAAGGTTCTCTTTTCATAGTCCAAATCCTATTGTCCACAGTCA
GACTTCTACAACCTCCTCTGAACAAATGCAGCCTCCAATGTTTCACTCTCAAAGTACCATTGCTGTGTTA
CAGGGCTCTTTCAGTTCCTCAAGACCAGCAGTCAACCAACATATTTCTTCCAGAGTCCCATGAATAATC
TTCAGACTAACACAGTAGCCCAAGAAGCATTTTTTGCAGCACCGAACTCAATTTCTCCACTTCAGTCAAC
ATCAAACAGTGAACAACAAGCTGCTTTCACAGCAAGCTCCAATATCACACATCCAGACTCCTATGCTT
TCCAAGAAGCAGGCACAACCCCGCAGCAGGGTTTATTTAGCCTCAGGTGGCCCTGGGCTCCCTCCAC
CTAATCCAATGCCTCAAAGCCAACAAGGAACCATGTTCCAGTCACAGCACTCAATAGTTGCCATGCAGAG
TAACTCTCCATCCAGGAACAGCAGCAGCAGCAACAGCAGCAGCAACAGCAGCAGCAACAACAACAG
AGCATTATTCAGTAATCAGAATACCATGGCTACAATGGCGTCTCAAAGCAACCACCACCAACATGA
TATTCAACCCAAATCAAATCCAATGGCTAATCAGGAGCAACAGAACCAGTCAATTTTTCAACAACAAG
TAACATGGCCCAATGAATCAAGAGCAACAGCCATGCAATTTAGAGTCAGTCCACAGTTTCTCACTT
CAGAACCAGGTCTACCCAGTCGGAAATCATCACAGACCCCTTGTTCATAGCTCTCCTCAGATTTCAGT
TGGTACAAGGGTACCTAGTTCTCAAGAGCAGCAAGTAACTCTCTTATCTCCAGCATCCATGTCTGC
CTTGACAGACCAGTATAAATCAACAAGATATGCAACAGTCTCCTCTTATTTCCCTCAGAACAACATGCCT
GGAATTCAGGAGCCACATCTTCGCCTCAACCACAGGCTACTTTATTTACAACACAGCAGGAGGCCACAA
TGAACCAACTGCAGAATCTCCTGGCTCATCTCAGCAGACATCAGGAATGTTCTTATTTGGCATTCAAAA
TAACTGTAGTCAGTTTTAACCTCTGGACCAGCTACATTGCCTGATCAGTTGATGGCCATAAGTCAGCCA
GGCCAACCACAAAACGAGGGCCAGCCACCTGTGACAACACTTTTCTCAGCAAAATGCCAGAGAATTCTC
CACTGGCATCCTCTATAAACACCAACCAGAACATCGAAAAGATTGATTTGCTTGTTCATTGCAAAACCA
AGGGAACAACCTTACTGGCTCCTTT

ACGGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG235309 representing NM_173215
 Red=Cloning site Green=Tags(s)

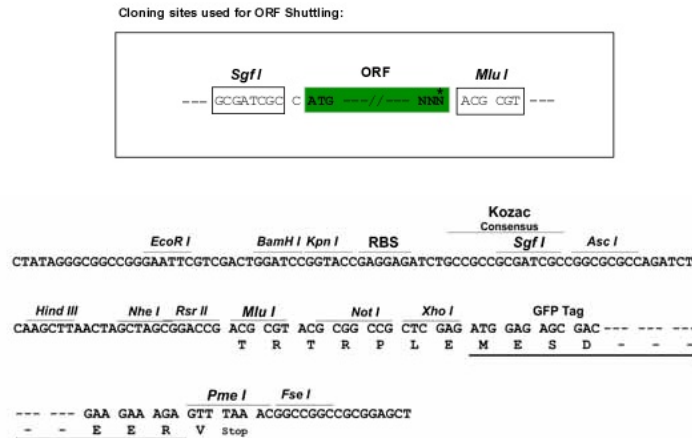
MGGACSSFTTSSSPTIYSTSVTDSKAMQVESCSSAVGVSNRGVSEKQLTSNTVQQHPSTPKRHTVLYISP
 PPEDLLDNSRMSQCDEGCGLESEQSCSMWMEDSPSNFSNMSTSSYNDNTEVPRKSRKRNPQRPGVKRRD
 CEESNMDIFDADSAKAPHYVLSQLTTDNKGNKAGNGTLENQKGTGVKKSPMLCGQYPVKSEGKELKIVV
 QPETQHRARYL TEGSRGSVKDR TQQGFPTVKLEGHNEPVVLQV FVGNDSGRVKPHGFYQACRV TGRNTTP
 CKEVDIEGTTVIEVGLDPSNNMTLAVDCV GILKLRNADVEARIGIAGSKKSTRARLVFRV NIMRKDGST
 LTLQTPSSPILCTQPAGVPEILKSLHSCSVKGE EEFVFLIGKNFLKGT KVI FQENVSDENSWKSEAEIDM
 ELFHQNHLIVKVPPYHDQHITLPVSVGIYVVTNAGRSHDVQPFYTPDPAAGALNVNVKKEISSPARPC
 SFEEAMKAMKTTGCNLDKVNIIIPNALMTP LIPSSMIKSEDVTPMEVTAEKRSSTIFKTTKSVGSTQQTLE
 NISNIAGNGSFSSPSSSHLPSENEKQQQIQPKAYNPETLTTIQTQDISQPGTFPAVSASSQLPNSDALLQ
 QATQFQTRETSREILQSDGTVVNLSQLTEASQQQQQSPLQEQAQTLQQQISSNIFPSPNSVSQLQNTIQ
 QLQAGSF TGSTASGSSGSVDL VQQVLEAQQQLSSVLF SAPDGNENVQEQLSADIFQQVSQIQSGVSPGMF
 SSTEPTVHTRPDNLLPGRAESVHPQSENTLSNQQQQQQQQQVMESSAAMV MEMQQSICQAAAQIQSELF
 PSTASANGNLQQSPVYQQTSHMMSALSTNEDMQQCELFSSPPAVSGNETSTTTTQQVATPGTTMFQTSS
 SGDGEETGTAKQIQNSVFQTMVQM QHSGDNQPQVNLFSSTKSMMSVQNSGTQQQGNGLFQQGNEMMSLQ
 SGNFLQQSSHSQAQLFHPQNPIADAQNLSQETQGS LFHSPNPIVHSQTSTTSSEQMPPMFHSQSTIAVL
 QGSSVPQDQQSTNIFLSQSPMNNLQNTNTVAQEAF FAAPNSISPLQSTSNSEQAAAFQQQAPI SHIQTPML
 SQEQAQPPQQLFQPQVALGSLPPNPMPQSQQGTMFQSQHSIVAMQSNPSQEQQQQQQQQQQQQQQQ
 SILFSNQNTMATMASPKPPPNMIFNPNQNP MANQEQQNQSI FHQQSNMAMPNQEQQPMQFSQSTVSSL
 QNPGPTQSESSQTPLFHSSPQIQLVQGS PSSQEQQVTLFLSPASMSALQTSINQQDMQQSPLYSPQNNMP
 GIQGATSSPQPQATL FHNTAGGTMNQLQNSP GSSQQTSGMFLFGIQNNCSQLL TSGPATLPDQLMAISQP
 GQPQNEGQPPVTLLSQQMPENSPLASSINTNQNI EKIDLLVSLQNQGNL TGSF

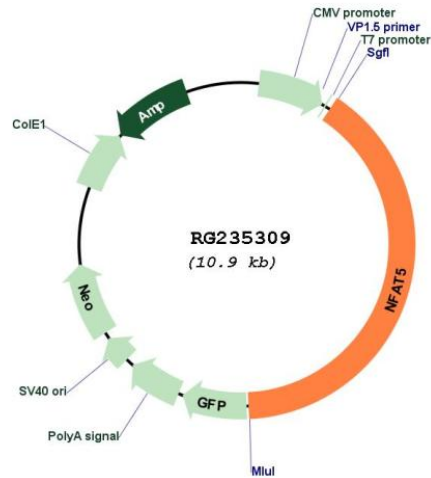
TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN:	NM_173215
ORF Size:	4365 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:	<ol style="list-style-type: none">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_173215.3
RefSeq Size:	5311 bp
RefSeq ORF:	4368 bp
Locus ID:	10725
UniProt ID:	O94916
Cytogenetics:	16q22.1
Protein Families:	Druggable Genome, Transcription Factors
Protein Pathways:	Axon guidance, B cell receptor signaling pathway, Natural killer cell mediated cytotoxicity, T cell receptor signaling pathway, VEGF signaling pathway, Wnt signaling pathway
Gene Summary:	The product of this gene is a member of the nuclear factors of activated T cells family of transcription factors. Proteins belonging to this family play a central role in inducible gene transcription during the immune response. This protein regulates gene expression induced by osmotic stress in mammalian cells. Unlike monomeric members of this protein family, this protein exists as a homodimer and forms stable dimers with DNA elements. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]