

Product datasheet for **RG234745**

NFAT1 (NFATC2) (NM_001258294) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NFAT1 (NFATC2) (NM_001258294) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	NFAT1
Synonyms:	NFAT1; NFATP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide
Sequence:**

>RG234745 representing NM_001258294
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCACCTCGAACCAGCCTCGCCGAGGACAGCTGCCTGGGCCGCCACTCGCCCGTGCCCGTCCGGCCT
 CCCGCTCCTCATCGCCTGGTGCCAAGCGGAGGCATTTCGTGCGCCGAGGCCTTGGTTGCCCTGCCGCCGG
 AGCCTCACCCAGCGCTCCCGGAGCCCTCGCCGAGCCCTCATCTCACGTGGCACCCAGGACCACGGC
 TCCCCGGCTGGGTACCCCTGTGGCTGGCTGCTGCCGTGATCATGGATGCCCTGAACAGCCTCGCCACGG
 ACTCGCCTTGTGGGATCCCCCAAGATGTGGAAGACCAGCCCTGACCCCTCGCCGGTGTCTGCCGCC
 ATCCAAGCGCCGCTGCCTCGCCACATCTACCCGGCCGTGGAGTTCCTGGGGCCCTGCGAGCAGGGCGAG
 AGGAGAACTCGGCTCCAGAATCCATCCTGCTGGTTCGCCCACTGGCCCAAGCCGCTGGTGCCTGCCA
 TTCCCATCTGCAGCATCCAGTACTGCATCCCTCCCTCACTTGAGTGGCCGCTGTCCAGTCAGTCAGG
 CTCTTACGAGCTCGGGATCGAGGTGCAGCCCAAGCCACATCACCCGGCCACTATGAGACAGAAGGCAGC
 CGAGGGGCTGTCAAAGCTCCAAGTGGAGGCCACCTGTGGTTCAGCTCCATGGCTACATGAAAAACAAGC
 CTCTGGGACTTCAGATCTTCATTGGGACAGCTGATGAGCGGATCCTTAAGCCGCACGCCTTCTACCAGGT
 GCACCGAATCACGGGAAAACTGTCAACCACCAGCTATGAGAAGATAGTGGGCAACACAAAGTCCCTG
 GAGATACCCTTGGAGCCAAAAACAACATGAGGGCAACCATCGACTGTGCGGGGATCTTGAAGCTTAGAA
 ACGCCGACATTGAGCTGCGGAAAGGCGAGACGGACATTGGAAGAAAGAACACGCGGGTGAGACTGGTTTT
 CCGAGTTCACATCCCAGAGTCCAGTGGCAGAATCGTCTCTTTACAGACTGCATCTAACCCATCGAGTGC
 TCCCAGGATCTGCTCACGAGCTGCCATGGTTGAAAGACAAGACACAGACAGCTGCCTGGTCTATGGCG
 GCCAGCAAATGATCCTCACGGGGCAGAACTTTACATCCGAGTCCAAAGTTGTGTTTACTGAGAAGACCAC
 AGATGGACAGCAAATTTGGGAGATGGAAGCCACGGTGGATAAGGACAAGAGCCAGCCCAACATGCTTTTT
 GTTGAGATCCCTGAATATCGGAACAAGCATATCCGCACACCTGTAAAAGTGAAGTCTACGTCATCAATG
 GGAAGAGAAAACGAAGTCAGCCTCAGCACTTTACCTACCACCCAGTCCCAGCCATCAAGACGGAGCCAC
 GGATGAATATGACCCCACTCTGATCTGCAGCCCCACCATGGAGGCTGGGGAGCCAGCCTTACTACCCC
 CAGCACCCGATGGTGGCCGAGTCCCCCTCCTGCCTCGTGGCCACCATGGCTCCCTGCCAGCAGTCCGCA
 CGGGGCTCTCATCCCCTGACGCCGCTACCAGCAACAGAACCCAGCGGCCGTACTCTACCAGCGGAGCAA
 GAGCCTGAGCCCCAGCCTGCTGGGCTATCAGCAGCCGGCCCTCATGGCCGCCCGCTGTCCCTTGGCGAC
 GCTCACCGCTCTGTGCTGGTGCACGCCGCTCCCAGGGCCAGAGCTCAGCCCTGTCCACCCCTCTCCGA
 CCAACCAGCAGGCTCGCCTGTGATCCACTACTACCCACCAACCAGCAGCTGCGCTGCGGAAGCCACCA
 GGAGTTCAGCACATCATGTACTGCGAGAATTCGCACCAGGCACCACCAGACCTGGCCCCCCCCGGTC
 AGTCAAGGTGAGAGGCTGAGCCCGGTTCTACCCACAGTCATTGAGCAGCAGAATGCCACGAGCCAAA
 GAGCCGCCAAAAACGGACCCCGGTGAGTACCAAAAGGAAGTATTACCTGCGGGGGTGACCATTAACA
 GGAGCAGAACTTGGACCAGACCTACTTGGATGATGAGCTGATAGACACACACCTTAGCTGGATACAAAAC
 ATATTA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG234745 representing NM_001258294
 Red=Cloning site Green=Tags(s)

MSPRTSLAEDSCLGRHSPVPRPASRSSSPGAKRRHS CAEALVALPPGASPQRSRSPSPQSSSHVAPQDHG
 SPAGYPPVAGSAVIMDALNSLATDSPCGIPPKMWKTS PDPSPVSAAPSKAGLPRHIYPAVEFLGPCEQGE
 RRNSAPESILLVPPTWPKPLVPAIPICSIPTASLP PLEWPLSSQSGSYELRIEVQPKPHHRAHYETEGS
 RGAVKAPTGGHPVVQLHGMYENKPLGLQIFIGTAD ERILKPHAFYQVHRITGKTVTTTSYEKIVGNTKVL
 EIPLEPKNNMRATIDCAGILKLRNADIELRKGETDI GRKNTRVRLVFRVHIPESSGRIVSLQTASNPIEC
 SQRSAHELPMVERQD TDSCLVYGGQQMILTGQNF TSESKVVFTEKTTDGQQIWEMEATVDKDKSQPNMLF
 VEIPEYRNKHIRTPVKVNFYVINGKRKRSQPQHFT YHPVPAIKTEPTDEYDPTLICSPHGGGLGSQPYYP
 QHPMVAESPSCLVATMAPCQQFRTGLSSPDARYQQ NPAAVLYQRSKLSLPSLLGYQQPALMAAPLSLAD
 AHRSVLVHAGSQGSSALLHPSPTNQQASPVIIHYS PTNQQLRCSHQEFQHIMYCENFAPGTTTRPGPPP
 V SQGQRLSPGSYPTVIQQNATSQRAAKNGPPVSDQ KEVLPAGVTIKQEQLNDQTYLDELIDTHLSWIQN
 IL

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001258294

ORF Size: 2106 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_001258294.2](#)

RefSeq Size: 6938 bp

RefSeq ORF: 2109 bp

Locus ID: 4773

UniProt ID: [Q13469](#)

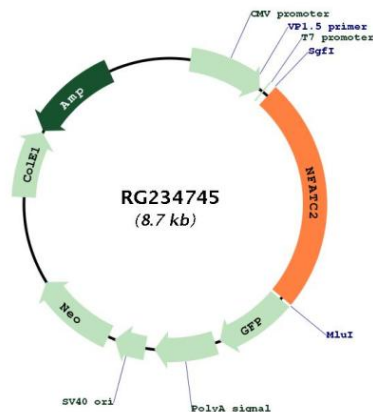
Cytogenetics: 20q13.2

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 is a member of the nuclear factor of activated T cells (NFAT) family. The product of this gene is a DNA-binding protein with a REL-homology region (RHR) and an NFAT-homology region (NHR). This protein is present in the cytosol and only translocates to the nucleus upon T cell receptor (TCR) stimulation, where it becomes a member of the nuclear factors of activated T cells transcription complex. This complex plays a central role in inducing gene transcription during the immune response. Alternate transcriptional splice variants encoding different isoforms have been characterized. [provided by RefSeq, Apr 2012]

Product images:



Circular map for RG234745