

Product datasheet for **RG234751**

NFAT1 (NFATC2) (NM_001258297) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NFAT1 (NFATC2) (NM_001258297) 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:

>RG234751 representing NM_001258297
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGTCACCTCGAACCAGCCTCGCCGAGGACAGCTGCCTGGGCCGCCACTCGCCCGTGCCCGTCCGGCCT
CCCGCTCCTCATCGCCTGGTGCCAAGCGGAGGCATTTCGTGCGCCGAGGCCTTGGTTGCCCTGCCGCCGG
AGCCTCACCCAGCGCTCCCGGAGCCCTCGCCGAGCCCTCATCTCACGTGGCACCCAGGACCACGGC
TCCCCGGCTGGGTACCCCTGTGGCTGGCTGCTGCGGTGATCATGGATGCCCTGAACAGCCTCGCCACGG
ACTCGCCTTGTGGGATCCCCCAAGATGTGGAAGACCAGCCCTGACCCCTCGCCGGTGTCTGCCGCC
ATCCAAGCGCCGCTGCCTCGCCACATCTACCCGGCCGTGGAGTTCCTGGGGCCCTGCGAGCAGGGCGAG
AGGAGAACTCGGCTCCAGAATCCATCCTGCTGGTTCGCCCACTGGCCCAAGCCGCTGGTGCCTGCCA
TTCCCATCTGCAGCATCCAGTACTGCATCCCTCCCTCACTTGAGTGGCCGCTGTCCAGTCAGTCAGG
CTTTACGAGCTCGGGATCGAGGTGCAGCCCAAGCCACATCACCCGGCCACTATGAGACAGAAGGCAGC
CGAGGGGCTGTCAAAGCTCCAAGTGGAGGCCACCTGTGGTTCAGCTCCATGGCTACATGGAAAACAAGC
CTCTGGGACTTCAGATCTTCATTGGGACAGCTGATGAGCGGATCCTTAAGCCGCACGCCTTCTACCAGGT
GCACCGAATCACGGGAAAACTGTCAACCACCAGCTATGAGAAGATAGTGGGCAACACAAAGTCCCTG
GAGATACCCTTGGAGCCAAAAACAACATGAGGGCAACCATCGACTGTGCGGGGATCTTGAAGCTTAGAA
ACGCCGACATTGAGCTGCGGAAAGGCGAGACGGACATTGGAAGAAAGAACACGCGGGTGAGACTGGTTTT
CCGAGTTCACATCCAGAGTCCAGTGGCAGAATCGTCTCTTTACAGACTGCATCTAACCCATCGAGTGC
TCCCAGGATCTGCTCACGAGCTGCCATGGTTGAAAGACAAGACACAGACAGCTGCCTGGTCTATGGCG
GCCAGCAAATGATCCTCACGGGGCAGAACTTTACATCCGAGTCCAAAGTTGTGTTTACTGAGAAGACCAC
AGATGGACAGCAAATTTGGGAGATGGAAGCCACGGTGGATAAGGACAAGAGCCAGCCCAACATGCTTTTT
GTTGAGATCCCTGAATATCGGAACAAGCATATCCGCACACCTGTAAAAGTGAAGTCTACGTCATCAATG
GGAAGAGAAAACGAAGTCAGCCTCAGCACTTTACCTACCACCCAGTCCCAGCCATCAAGACGGAGCCAC
GGATGAATATGACCCCACTCTGATCTGCAGCCCCACCATGGAGGCTGGGGAGCCAGCCTTACTACCCC
CAGCACCCGATGGTGGCCGAGTCCCCCTCCTGCCTCGTGGCCACCATGGCTCCCTGCCAGCAGTCCGCA
CGGGGCTCTCATCCCCTGACGCCGCTACCAGCAACAGAACCCAGCGGCCGACTCTACCAGCGGAGCAA
GAGCCTGAGCCCCAGCCTGCTGGGCTATCAGCAGCCGGCCCTCATGGCCGCCCGCTGTCCCTTGGCGAC
GCTCACCGCTCTGTGCTGGTGCACGCCGGCTCCCAGGGCCAGAGCTCAGCCCTGTCCACCCCTCTCCGA
CCAACCAGCAGGCTCGCCTGTGATCCACTACTACCCACCAACCAGCAGCTGCGCTGCGGAAGCCACCA
GGAGTTCAGCACATCATGTACTGCGAGAATTTGCAACCAGGCACCACCAGACCTGGCCCCCCCCGGTC
AGTCAAGGTCAGAGGCTGAGCCCGGTTCTACCCACAGTCAATTCAGCAGCAGAATGCCACGAGCCAAA
GAGCCGCCAAAAACGGACCCCGGTGAGTACCAAAAGGAAGTATTACCTGCGGGGGTGACCATTAACA
GGAGCAGAACTTGGACCAGACCTACTTGGATGATGTTAATGAAATTATCAGGAAGGAGTTTTTCAGGACCT
CCTGCCAGAAATCAGACG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG234751 representing NM_001258297
 Red=Cloning site Green=Tags(s)

MSPRTSLAEDSCLGRHSPVPRPASRSSSPGAKRRHS CAEALVALPPGASPQRSRSPSPQSSSHVAPQDHG
 SPAGYPPVAGSAVIMDALNSLATDSPCGIPPKMWKTS PDPSPVSAAPSKAGLPRHIYPAVEFLGPCEQGE
 RRNSAPESILLVPPTWPKPLVPAIPICSIPTASL PPLEWPLSSQSGSYELRIEVQPKPHHRAHYETEGS
 RGAVKAPTGGHPVVQLHGMYENKPLGLQIFIGT ADERILKPHAFYQVHRITGKTVTTTSYEKIVGNTKVL
 EIPLEPKNNMRATIDCAGILKLRNADIELRKGET DIGRKNTRVRLVFRVHIPESSGRIVSLQTASNPIEC
 SQRSAHELPMVERQD TDSCLVYGGQQMILT GQNF TSESKVVFTEKTTDGQQIWEMEATVDKDKSQPNMLF
 VEIPEYRNKHIRT PVKVN FYVINGKRKRSQPQHFTYHPVPAIKTEPTDEYDPTLICSPHGGGLGSQPYYP
 QHPMVAESPSCLVATMAPCQQFRTGLSSPDARYQQNPA AVL YQRSKSLSPSLLGYQQPALMAAPLSLAD
 AHRSVLVHAGSQGSSALLHPSPTNQQASPVIIHYSPTNQQ LRCGSHQEFQHIMYCENFAPGTTTRPGPPP
 SQGQRLSPGSYPTVIQQNATSQRAAKNGPPVSDQKEVLPAGVTIKQEQLNDQTYLDDVNEIIRKEFSGP
 PARNQT

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001258297

ORF Size: 2118 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_001258297.2](#)

RefSeq Size: 6928 bp

RefSeq ORF: 2121 bp

Locus ID: 4773

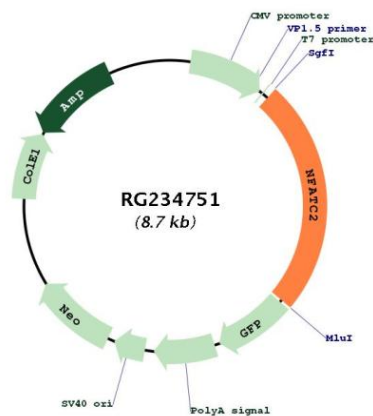
Cytogenetics: 20q13.2

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 RG234751