

Product datasheet for **RC234750**

NFAT1 (NFATC2) (NM_001258295) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NFAT1 (NFATC2) (NM_001258295) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NFAT1
Synonyms:	NFAT1; NFATP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>RC234750 representing NM_001258295
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCACCTCGAACCAGCCTCGCCGAGGACAGCTGCCTGGGCCGCCACTCGCCCGTGCCCGTCCGGCCT
 CCCGCTCCTCATCGCCTGGTGCCAAGCGGAGGCATTTCGTGCGCCGAGGCCTTGGTTGCCCTGCCGCCGG
 AGCCTCACCCAGCGCTCCCGGAGCCCTCGCCGAGCCCTCATCTCACGTGGCACCCAGGACCACGGC
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 ACTCGCCTTGTGGGATCCCCCAAGATGTGGAAGACCAGCCCTGACCCCTCGCCGGTGTCTGCCGCC
 ATCCAAGCGCGCCTGCCTCGCCACATCTACCCGGCCGTGGAGTTCCTGGGGCCCTGCGAGCAGGGCAG
 AGGAGAACTCGGCTCCAGAATCCATCCTGCTGGTTCGCCCACTGGCCCAAGCCGCTGGTGCCTGCCA
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 CTCTTACGAGCTCGGGATCGAGGTGCAGCCCAAGCCACATCACCCGGCCCACTATGAGACAGAAGGCAGC
 CGAGGGGCTGTCAAAGCTCCAACCTGGAGGCCACCTGTGGTTCAGCTCCATGGCTACATGGAAAACAAGC
 CTCTGGGACTTCAGATCTTCATTGGGACAGCTGATGAGCGGATCCTTAAGCCGCACGCCTTCTACCAGGT
 GCACCGAATCACGGGAAAACTGTCAACCACCAGCTATGAGAAGATAGTGGGCAACACAAAGTCCCTG
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 CCGAGTTCACATCCAGAGTCCAGTGGCAGAATCGTCTCTTTACAGACTGCATCTAACCCATCGAGTGC
 TCCCAGCATCTGCTCACGAGCTGCCATGGTTGAAAGACAAGACACAGACAGCTGCCTGGTCTATGGCG
 GCCAGCAAATGATCCTCACGGGGCAGAACTTTACATCCGAGTCCAAAGTTGTGTTACTGAGAAGACCAC
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 CGGGGCTCTCATCCCCTGACGCCGCTACCAGCAACAGAACCCAGCGGCCGTACTCTACCAGCGGAGCAA
 GAGCCTGAGCCCCAGCCTGCTGGGCTATCAGCAGCCGGCCCTCATGGCCGCCCGCTGTCCCTTGGGAC
 GCTCACCGCTCTGTGCTGGTGCACGCCGGCTCCCAGGGCCAGAGCTCAGCCCTGTCCACCCCTCTCCGA
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 GAGCCGCCAAAAACGGACCCCGGTGAGTACCAAAAGGAAGTATTACCTGCGGGGGTGACCATTAACA
 GGAGCAGAACTTGGACCAGACCTACTTGGATGATGTTAATGAAATTATCAGGAAGGAGTTTTTCAGGACCT
 CCTGCCAGAAATCAGACG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC234750 representing NM_001258295
 Red=Cloning site Green=Tags(s)

MSPRTSLAEDSCLGRHSPVPRPASRSSSPGAKRRHSCAEALVALPPGASPQRSRSPSPQSSHVAPQDHG
 SPAGYPPVAGSAVIMDALNSLATDSPCGIPPKMWKTSDDPSPVSAAPSKAGLPRHIYPAVEFLGPCEQGE
 RRNSAPESILLVPPTWPKPLVPAIPICSIPTASLPPLEWPLSSQSGSYELRIEVQPKPHHRAHYETEGS
 RGAVKAPTGGHPVVQLHGMYENKPLGLQIFIGTADERILKPHAFYQVHRITGKTVTTTSYEKIVGNTKVL
 EIPLEPKNNMRATIDCAGILKLRNADIELRKGETDIGRKNTRVRLVFRVHIPESSGRIVSLQTSNPIC
 SQRSAHELPMVERQDTSCLVYGGQQMILTGQNFSESQVVFTEKTTDGGQIWE MEATVDKDKSQPNMLF
 VEIPEYRNKHIRTPVKVNFYVINGKRKRSQPQHFTYHPVPAIKTEPTDEYDPTLICSPHGGGLSQPYYP
 QHPMVAESPSCLVATMAPCQQFRTGLSSPDARYQQNPAAVLYQRSKSLSPSLLGYQQPALMAAPLSLAD
 AHRSVLVHAGSQGSSALLHPSPTNQQASPVIIHYSPTNQLRCGSHQEFQHIMYCENFAPGTTTRPGPPP
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 PARNQT

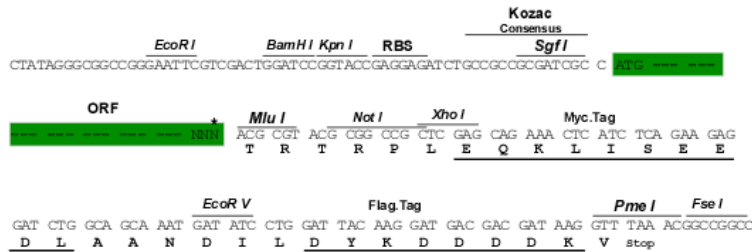
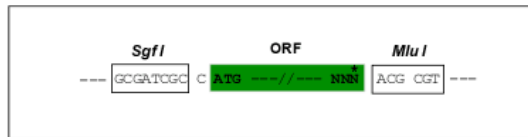
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001258295

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_001258295.2](#)

RefSeq Size: 6850 bp

RefSeq ORF: 2121 bp

Locus ID: 4773

Cytogenetics: 20q13.2

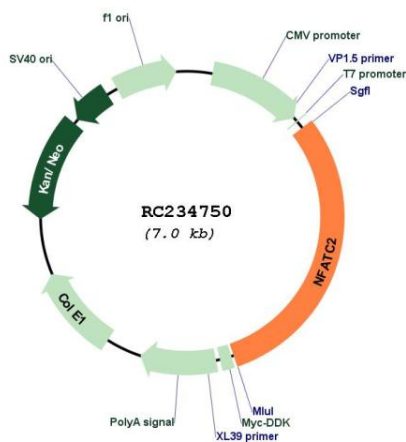
Protein Families: Druggable Genome, Transcription Factors

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

MW: 77.5 kDa

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 RC234750