

## Product datasheet for **RC212692**

### **NFAT2 (NFATC1) (NM\_006162) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	NFAT2 (NFATC1) (NM_006162) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NFAT2
Synonyms:	NF-ATC; NF-ATc1.2; NFAT2; NFATc
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC212692 representing NM\_006162  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCCAAGCACCAGCTTTCCAGTCCCTTCCAAGTTTCCACTTGGCCCTGCGGCTGCGGTCTTCGGGAGAG  
 GAGAAACTTTGGGGCCCGCGCCGCGCGCCGGCGCACCATGAAGTCAGCGGAGGAAGAACAACACTATGGCTA  
 TGATCTCTCCAACGTCAGCCCGCCCTGCGCTCCCCACGGCGCACTCCACCCTGCGGGCCCGTGCCAC  
 AACCTTCAGACTCCACACCGGGCATCATCCCGCGGGGATCACCCCTCGGGGTACGGAGCAGCTTTGG  
 ACGGTGGGCCCGGGCTACTTCTCTCTCCGGCCACACCAGGCCTGATGGGGCCCTGCCCTGGAGAG  
 TCCTCGCATCGAGATAACCTCGTGCTTGGGCTGTACCACAACAATAACCAAGTTTTTCCACGATGTGGAG  
 GTGAAGAGCTCTCCCTAGCTCCAACGGTCCCCCTCCACGGCCACGCTGAGTCTGCCAGCCTGGAGG  
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 GAAACTCAGAACTCCGACATTGAACCTCGAAAGGAGAGACGGACATCGGGAGGAAGAACACACGGGTA  
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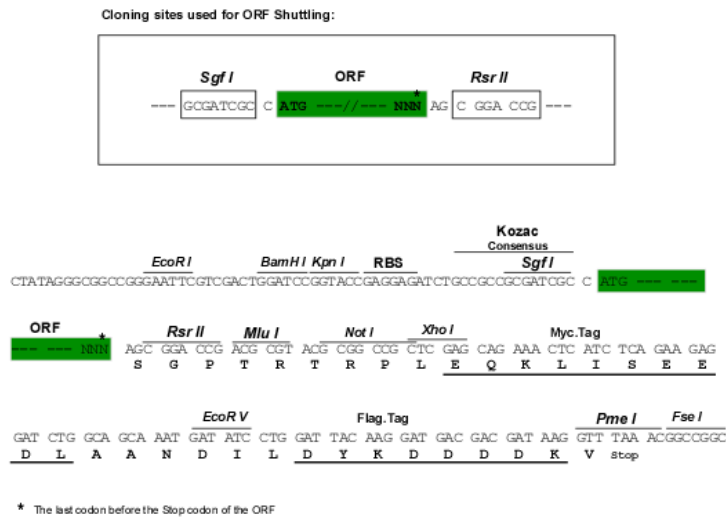
**Protein Sequence:** >RC212692 representing NM\_006162  
Red=Cloning site Green=Tags(s)

MPSTSFVPVPSKFPLGPAAAVFGRGETLGPAPRAGGTMKSAEEEHYGYASSNVSPALPLPTAHSTLPAPCH  
NLQTSTPGIIPPADHPSGYGAALDGGPAGYFLSSGHTRPDGAPALESPRIEITSCLGLYHNNNQFFHDVE  
VEDVLPSSKRSPSTATLSLPSLEAYRDPSCSPASSLSSRSCNSEASSYESNYSYPYASPQTSPWQSPCV  
SPKTTDPEEGFPRGLGACTLLGSPRHSPSTSPRASVTEESWLGARSSRPASPCNKRYSLNGRQPPYSPH  
HSPTSPHGSPPRVSVTDDSWLGNTTQYTSSAIVAAINALTTDSSLDLGDGVPVKSRRKTTLEQPPSVALKV  
EPVGEDLGSPPPPADFAPEDYSSFQHIRKGGFCQYLAVPQHPYQWAKPKPLSPTSYMSPTLPALDWQLP  
SHSGPYELRIEVQPKSHHRAHYETEGSRGAVKASAGGHPIVQLHGYLENEPLMLQLFIGTADDRLLRPHA  
FYQVHRITGKTVSTTSHEAILSNTKVLEIPLLPENSMRAVIDCAGILKLRNSDIELRKGETDIGRKNTRV  
RLVFRVHVPQPSGRTLSLQVASNPIECSQRSQELPLVEKQSTDSYPVVGKKMVLSGHNFLQDSKVIFV  
EKAPDGHVWEMEAKTDRDLCKPNSLVVEIPFRNQRITSPVHVSFYVCNGKRKRSQYQRFYLPANVPI  
IKTEPTDDYEPAPTCGPVSQGLSPLRPYYSQQLAMPDPSSCLVAGFPFGPQRSTLMPAAPGVSPKLHD  
LSPAAYTKGVASPGHCHLGLPQPAGEAPAVQDVPRPVATHPGSPGQPPALLPQQ

SGPTRRRLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mg4355\\_g05.zip](https://cdn.origene.com/chromatograms/mg4355_g05.zip)

**Restriction Sites:** Sgfl-RsrII

**Cloning Scheme:**


**ACCN:** NM\_006162

**ORF Size:** 2475 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\\_006162.5](#)

**RefSeq Size:** 4762 bp

**RefSeq ORF:** 2478 bp

**Locus ID:** 4772

**UniProt ID:** [O95644](#)

**Cytogenetics:** 18q23

**Domains:** RHD, IPT

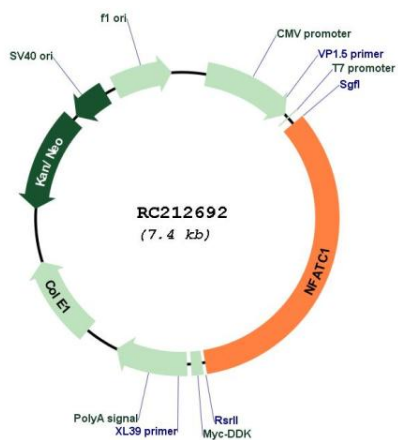
**Protein Families:** Druggable Genome, Transcription Factors

**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

**MW:** 88.6 kDa

**Gene Summary:** The product of this gene is a component of the nuclear factor of activated T cells 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 (TCR) stimulation, and an inducible nuclear component. Proteins belonging to this family of transcription factors play a central role in inducible gene transcription during immune response. The product of this gene is an inducible nuclear component. It functions as a major molecular target for the immunosuppressive drugs such as cyclosporin A. Multiple alternatively spliced transcript variants encoding distinct isoforms have been identified for this gene. Different isoforms of this protein may regulate inducible expression of different cytokine genes. [provided by RefSeq, Jul 2013]

Product images:



Circular map for RC212692