

Product datasheet for **RC226608**

NFATC4 (NM_001136022) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NFATC4 (NM_001136022) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NFATC4
Synonyms:	NF-AT3; NF-ATC4; NFAT3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC226608 representing NM_001136022
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGATAACCACCCTCCCATCTCTCTACCCGCCAGCCTCGCCAGTATCTCCACCAGTACGAATCTCC
 CATCTAACTCCCTCTCACACAACCAGGCTCTCCAAGCCTGACTTCCCGGAAACTCCAGTCCAGGTCT
 TCCTTCTCTCCAGCCAGGCCGGGACCTGGGGCTCCTGCCGATCCATGGGGCGGCCAGTCCGAG
 GATGAGGAGCTGGAATTTAAGCTGGTGTTCGGGGAGGAAAAGGAGGCCCGCCCGTGGGCGGGGGAT
 TGGGGGAAGAACTGGACTCAGAGGATGCCCGCCATGCTGCCGTGGCCTGGGAGAGCCCTCCCTA
 TGGCGTGCACCTATCGGTATCCCGACCTCCACCCCTCGGCCTGGCATGCATTGCCACCGCCGCA
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC226608 representing NM_001136022
 Red=Cloning site Green=Tags(s)

MITTLPSLLPASLASISHRVTNLPSNSLSHNPGLSKPDFGNSSPGLPSSSSPGRDLGAPAGSMGAASCE
 DEELEFKLVFGEEKEAPPLGAGGLGEELDSEDAPPCCRLALGEPPIYGAAPIGIPRPPPPRGMHSPPPR
 PAPSPGTWESQPARSVRLGGPGGGAGGAGGGRVLECPISIRITISISPTPEPPAALEDNPDWGDGSPRDYP
 PPEGFGGYREAGQGQGAFFSPSPGSSLSWSWFFSDASDEAALYAACDEVESELNEAASRFGLGSPLPS
 PRASRPWTPEDPWSLYGPPGGRPEDSWLLLSAPGTPASPRPASPCGKRRYSSSGTPSSASPALSRR
 GSLGEEGSEPPPPPLPLARDPGSPGPFYVYGAPPAESIPQKTRRTSSEQAVALPRSEEPASCNGKPLPG
 AEESVAPPGSRKEVAGMDYLAVPSPLAWSKARIGGHSPIFRTSALPPLDWPLPSQYEQLELRIEVQPR
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 EAVVSGTKVLEMTLLPENMAANIDCAGILKLRNSDIELRKGETDIGRKNTRVRLVFRVHVPQGGGKVV
 VQAASVPIECSQSAQELPQVEAYSPSACSVRGGEEVL TGSNFLPDSKVVFIERGPDGKLQWEEATVN
 RLQSNVTLTLTVPEYSNKRVRPVQVYFVYVNGRRKRSPTQSFRLPVICKEEPLDSSLRGFPASAT
 PFGTDMDFSPRPPYPSPHEDPACETPYLSEGFYGMPLLYPQTGPPPSYRPLRMFPETRGTGCAQP
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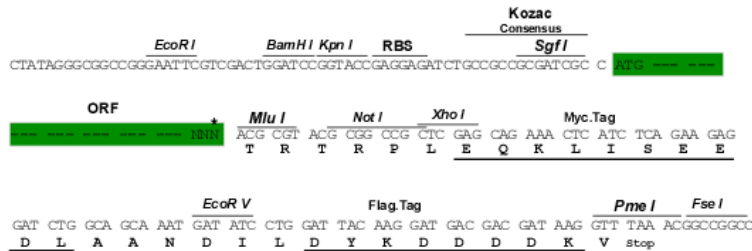
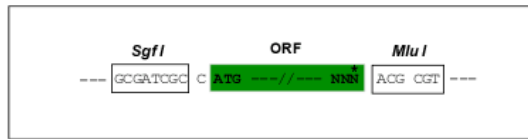
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8031_b12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



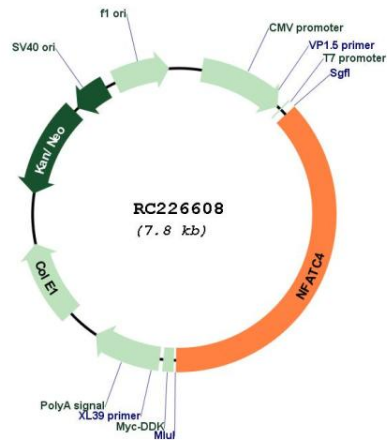
* The last codon before the Stop codon of the ORF

ACCN: NM_001136022

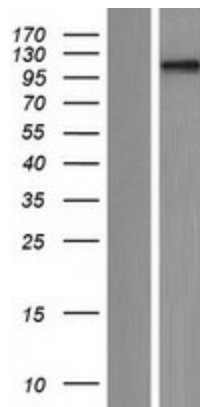
ORF Size: 2892 bp

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_001136022.2
RefSeq ORF:	2895 bp
Locus ID:	4776
UniProt ID:	Q14934
Cytogenetics:	14q12
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:	101.3 kDa
Gene Summary:	This gene encodes a member of the nuclear factor of activated T cells (NFAT) protein family. The encoded protein is part of a 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 stimulation and an inducible nuclear component. NFAT proteins are activated by the calmodulin-dependent phosphatase, calcineurin. The encoded protein plays a role in the inducible expression of cytokine genes in T cells, especially in the induction of interleukin-2 and interleukin-4. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2014]

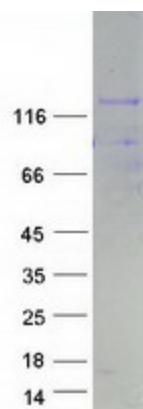
Product images:



Circular map for RC226608



Western blot validation of overexpression lysate (Cat# [LY427771]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC226608 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NFATC4 protein (Cat# [TP326608]). The protein was produced from HEK293T cells transfected with NFATC4 cDNA clone (Cat# RC226608) using MegaTran 2.0 (Cat# [TT210002]).