

## Product datasheet for RC216142

### NFAT5 (NM\_006599) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	NFAT5 (NM_006599) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NFAT5
Synonyms:	NF-AT5; NFATL1; NFATZ; OREBP; TONEBP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC216142 representing NM_006599 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCCCTCGGACTTCATCTCATTGCTCAGCGGGACCTAGACCTGGAATCGCCCAAGTCCCTCTACTCGC  
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC216142 representing NM\_006599  
 Red=Cloning site Green=Tags(s)

MPSDFISLLSADLDLESPKSLYSRESVYDLLPKELQLPPSRETSVASMSQTSNGEAGSPPPVAVAADASS  
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 VLYISPPPEDLLDNSRMSCQDEGCGLESEQSCSMWEDSPSNFSNMSTSSYNDNTEVPRKSRKRNPKQRP  
 GVKRRDCEESNMDIFDADSAKAPHYVLSQLTTDNKGNKAGNGTLENQKGTGVKKSPLMCGQYPVKSEK  
 ELKIVVQPETQHRARYLTEGSRGSVKDRTOQGFPVVKLEGHNEPVVLQVFGNDSGRVKPHGFYQACRVT  
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 PQNNMPGIQGATSSPQPQATLFHNTAGGTMNQLQNSPGSSQQTSGMFLFGIQNNCSQLLTSGPATLPDQL  
 MAISQPGQPQNEGQPPVTLLSQMPENSPLASSINTNQNI EKIDLLVSLQNGNNLTGFSF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_006599

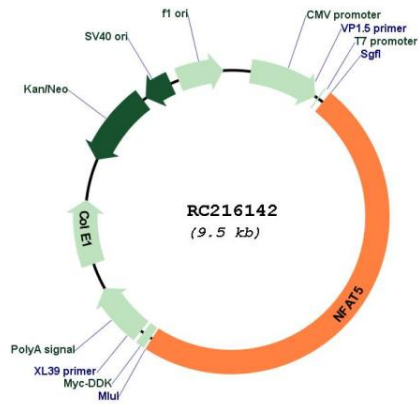
**ORF Size:** 4593 bp

<b>OTI Disclaimer:</b>	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_006599.4</a>
<b>RefSeq Size:</b>	13253 bp
<b>RefSeq ORF:</b>	4596 bp
<b>Locus ID:</b>	10725
<b>UniProt ID:</b>	<a href="#">O94916</a>
<b>Cytogenetics:</b>	16q22.1
<b>Domains:</b>	IPT
<b>Protein Families:</b>	Druggable Genome, Transcription Factors
<b>Protein Pathways:</b>	Axon guidance, B cell receptor signaling pathway, Natural killer cell mediated cytotoxicity, T cell receptor signaling pathway, VEGF signaling pathway, Wnt signaling pathway
<b>MW:</b>	165.8 kDa

**Gene Summary:**

The product of this gene is a member of the nuclear factors of activated T cells family of transcription factors. Proteins belonging to this family play a central role in inducible gene transcription during the immune response. This protein regulates gene expression induced by osmotic stress in mammalian cells. Unlike monomeric members of this protein family, this protein exists as a homodimer and forms stable dimers with DNA elements. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

**Product images:**



Circular map for RC216142