

Product datasheet for **RC224083**

NFAT5 (NM_138713) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: NFAT5 (NM_138713) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: NFAT5
Synonyms: NF-AT5; NFATL1; NFATZ; OREBP; TONEBP
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RC224083 representing NM_138713
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGCCCTCGGACTTCATCTCATTGCTCAGCGGGACCTAGACCTGGAATCGCCCAAGTCCCTCTACTCGC
GAGATTCTCTGAAGTTACACCCATCACAGAATTTTCATAGAGCTGGACTATTGGAAGAATCTGTCTATGA
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GGTGGTGAGGCAGGCTCGCTCCTCCAGCTGTTGTTGCTGCTGATGCTTCTTCAGCTCCCTCCTCTCTCT
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
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Protein Sequence: >RC224083 representing NM_138713
 Red=Cloning site Green=Tags(s)

MPSDFISLLSADLDLESPLKSLYSRDSLKHLPSQNFHRAGLLEESVYDLLPKELQLPPSRETSVASMSQTS
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 DNTEVPRKSRKRNPQRPQVGRDRDCEESNMDIFDADSAKAPHYVLSQLTDTNKGNSKAGNGTLENQKGTG
 YKKSPLMCGQYPVKSEGKELKIVVQPETQHRARYLTEGSRGSKVDRTQQGFPTVKLEGHNEPVVLQVFG
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 GSKKKSTRARLVFRVNIIMRDKGSTLTLQTPSSPILCTQPAGVPEILKSLHSCSVKGEVEFLIGKNFLK
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 LQQQISSNIFPSPNSVSQLQNTIQQLQAGSFTGSTASGSSGVDLVQQVLEAQQQLSSVLFAPDGNENV
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 GNETSTTTTQQVATP GTT MFQTSSSGDGEETGTQAKIQNSVFQTMVQM QHSGDNQPQVNLFSSTKSMMS
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 QTSTTSSEQMPPMFHSQSTIAVLQGSVPQDQQTNI FL SQSPMNNLQNTVAQEAF AAPNSISPLQS
 TSNSEQQAAFQQQAPISHIQTPMLSQEQAPPPQGLFQPQVALGSLPPNPMPQSQQGTMFQSQHSIVAMQ
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 SNMAPMNQEQQPMQFQSQSTVSSLQNPQPTQSESSQTPLFHSSPQIQLVQGSPPSQEQVTLFLSPASMS
 ALQTSINQQDMQQSPLYSPQNMPGIQGATSSQPQATLFHNTAGGTMNQLQNSPSSSQTS GMFLFGIQ
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 QGNLGTGSF

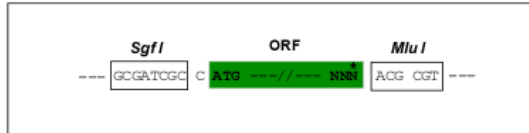
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

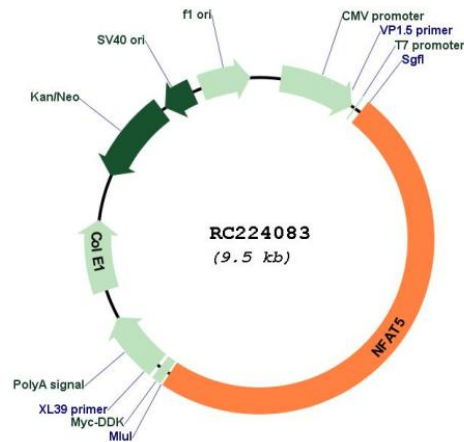
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_138713

ORF Size: 4647 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_138713.4
RefSeq Size:	13307 bp
RefSeq ORF:	4650 bp
Locus ID:	10725
UniProt ID:	O94916
Cytogenetics:	16q22.1
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:	167.8 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]