

Product datasheet for **RC218299**

NFAT5 (NM_173214) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NFAT5 (NM_173214) 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:	>RC218299 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCCTCGGACTTCATCTCATTGCTCAGCGGGACCTAGACCTGGAATCGCCCAAGTCCCTCTACTCGC
GAGATTCTCTGAAGTTACACCCATCACAGAATTTTCATAGAGCTGGACTATTGGAAGAATCTGTCTATGA
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GGTGGTGAGGCAGGCTCGCTCCTCCAGCTGTTGTTGCTGCTGATGCTTCTTCAGCTCCCTCCTTCTCT
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CAGCAAGGCTATGCAAGTGGAGAGCTGCTCCTCAGCCGTGGGGTAAGTAACAGAGGGTAAGTGAAAAG
CAGTTAACCAAGTAAACAGTTCAGCAGCATCCATCAACACCGAAGAGGCACACAGTCTTGTACATCTCAC
CACCACCTGAGGACTTGTGGATAACAGTCGGATGTCCTGCCAGGATGAGGGGTGTGGATTGGAATCTGA
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CTTGCAAAGAAGTGGACATTGAAGGCACTACTGTTATAGAAGTCGGCCTTGATCCTAGCAACAACATGAC
ACTGGCGGTGACTGCGTAGGGATATTGAAATTGAGGAATGCTGATGTCGAAGCCAGAATAGGAATTGCT
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 GCCAACCAAAAACGAGGGCCAGCCACCTGTGACAACACTTTTCTCAGCAAATGCCAGAGAATTCTCC
 ACTGGCATCCTCTATAAACCAACCAGAACATCGAAAAGATTGATTTGCTTGTTCATTGCAAAACCAA
 GGAACAACCTTGACTGGCTCCTT

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGAT AAGGTTTAA

Protein Sequence:

>RC218299 protein sequence
 Red=Cloning site Green=Tags(s)

MPSDFISLLSADLDLESPLKSLYSRDSLKLHPSQNFHRAGLLEESVYDLLPKELQLPPSRETSVASMSQTS
 GGEAGSPPPAVVAADASSAPSSSSMGGACSSFTTSSSPTIYSTSVTDSKAMQVESCSSAVGVSNRGVSEK
 QLTSTNTVQQHPSTPKRHTVL YISPPPEDLLDNRMSCQDEGCLESEQSCSMWMDSPSNF SNMSTSSYN
 DNTEVPRKSRKRNPQRPQGVKRRDCEESNMDIFDADSAKAPHYVLSQLT TDNKGNSKAGNGTLENQKGTG
 VKKSPMLCGQYPVKSEGKELKIVVQPETQHRARYL TEGSRGSVKDRTQQGFPTVKLEGHNEPVVLQVFG
 NDSGRVVKPHGFYQACRVTRNTTPCKEVDIEGTTVIEVGLDPSNNMTLAVDCVGIKLRNADVEARIGIA
 GSKKKSTRARLVFRVNI MRKDGSTLTLQTPSSPILCTQPAGVPEILKKSLSHSCSVKGEVEVFLIGKNFLK
 GTKVIFQENVSDENSWKSEAEIDMELFHQNLIVKVPYHDQHITL PVSVGIYVVTNAGRSHDVQPFTYT
 PDPAAGALNVNVKKEISSPARPCSFEEAMKAMKTTGCNLDKVNIPNALMTPLIPSSMIKSEDVTPMEVT
 AEKRSSTIFKTTKSVGSTQQTLENI SNIAGNGSFSSPSSSHLPSENEKQQQIQPKAYNPETLTTIQTDI
 SQPGTFPAVSASSQLPNSDALLQQATQFQTRETQSREILQSDGTVVNLSQLTEASQQQQQSPLEQAQTL
 QQQISSNIFSPNSVSQLQNTIQQLQAGSFTGSTASGSSGVDLVQQVLEAQQQLSSVLF SAPDGNENVQ
 EQLSADIFQQVSIQSGVSPGMFSSSTEPVHTRPDNLLPGRAESVHPQSENTLSNQQQQQQQQVMESS
 AAMVMEMQQSICQAAAQIQSELFPSTASANGNLQQSPVYQQTSHMSALSTNEDMQMQCELFSSPPAVSG
 NETSTTTTQQVATPGTTFMTQSSSGDGEETGTQAKQIQNSVFTMVQMQHSGDNQPQVNLFSSTKSMMSV
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 TSTTSSEQMPPMFHSQSTIAVLQGSVPQDQSTNIFLSQSPMNLQNTVAQEAFFAAPNSISPLQST
 SNSEQQAAAFQQQAPISHIQTPMLSQEQAQPPQQGLFQPQVALGSLPPNPMPQSQQGTMFQSQHSIVAMQS
 NSPSQEQQQQQQQQQQQQQQQSILFSNQNTMATMASPKQPPNMI FNPQNPMANQEQQNQSIFHQQS
 NMAMPNQEQQPMQFQSQSTVSSLQNPQPTQSESSQTPLFHSSPQIQLVQGGSPSSQEQQVTLFLSPASMSA
 LQTSINQDMQQSPL YSPQNNMPGIQGATSSPQATL FHNTAGTMMNQLQNSPGSSQQTSGMFLFGIQN
 NCSQLL TSGPATLPDQLMAISQPGQPQNEGQPPVTLLSQMPENSPLASSINTNQNI EKIDLLVSLQNG
 GNNLTGSF

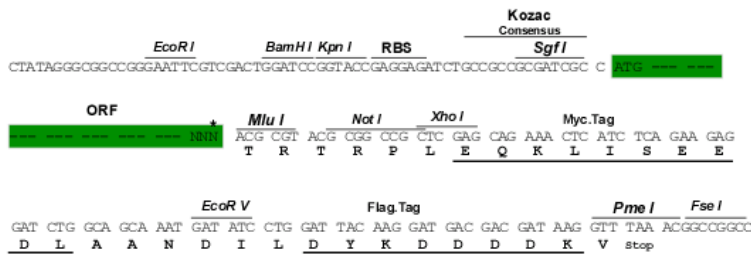
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

ACCN:

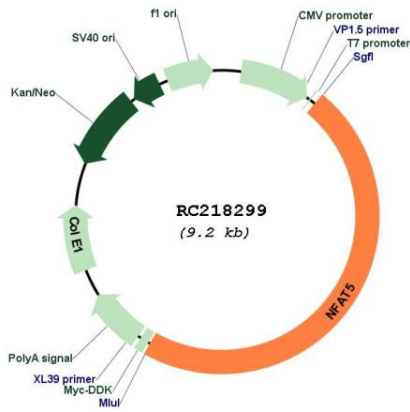
NM_173214

ORF Size:

4647 bp

OTI Disclaimer:	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 custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.
	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 Size:	13315 bp
RefSeq ORF:	4368 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:	167.7 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 RC218299