OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC212523

NFAT4 (NFATC3) (NM_004555) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NFAT4 (NFATC3) (NM_004555) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NFAT4
Synonyms:	NF-AT4c; NFAT4; NFATX
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC212523 representing NM_004555
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGACTACTGCAAACTGTGGCGCCCACGACGAGCTCGACTTCAAACTCGTCTTTGGCGAGGACGGGGCGC
CGGCGCCGCCGCCCCCGGGCTCGCGGCCTGCAGATCTTGAGCCAGATGATTGTGCATCCATTTACATCTT
TAATGTAGATCCACCTCCATCTACTTTAACCACACCACTTTGCTTACCACATCATGGATTACCGTCTCAC
TCTTCTGTTTTGTCACCATCGTTTCAGCTCCAAAGTCACAAAAACTATGAAGGAACTTGTGAGATTCCTG
AATCTAAATATAGCCCATTAGGTGGTCCCAAACCCTTTGAGTGCCCAAGTATTCAAATTACATCTATCTC
TCCTAACTGTCATCAAGAATTAGATGCACATGAAGATGACCTACAGATAAATGACCCAGAACGGGAATTT
TTGGAAAGGCCTTCTAGAGATCATCTCTATCTTCCTCTTGAGCCATCCTACCGGGAGTCTTCTCTTAGTC
CTAGTCCTGCCAGCAGCATCTCTTCTAGGAGTTGGTTCTCTGATGCATCTTCTTGTGAATCGCTTTCACA
TATTTATGATGATGTGGACTCAGAGTTGAATGAAGCTGCAGCCCGATTTACCCTTGGATCCCCTCTGACT
TCTCCTGGTGGCTCTCCAGGGGGCTGCCCTGGAGAAGAAACTTGGCATCAACAGTATGGACTTGGACACT
CATTATCACCCAGGCAATCTCCTTGCCACTCTCCTAGATCCAGTGTCACTGATGAGAATTGGCTGAGCCC
CAGGCCAGCCTCAGGACCCTCATCAAGGCCCACATCCCCCTGTGGGAAACGGAGGCACTCCAGTGCTGAA
GTTTGTTATGCTGGGTCCCTTTCACCCCATCACTCACCTGTTCCTTCACCTGGTCACTCCCCCAGGGGAA
GTGTGACAGAAGATACGTGGCTCAATGCTTCTGTCCATGGTGGGTCAGGCCTTGGCCCTGCAGTTTTTCC
ATTTCAGTACTGTGTAGAGACTGACATCCCTCTCAAAACAAGGAAAACTTCTGAAGATCAAGCTGCCATA
CTACCAGGAAAATTAGAGCTGTGTTCAGATGACCAAGGGAGTTTATCACCAGCCCGGGAGACTTCAATAG
ATGATGGCCTTGGATCTCAGTATCCTTTAAAGAAAGATTCATGTGGTGATCAGTTTCTTTCAGTTCCTTC
ACCCTTTACCTGGAGCAAACCAAAGCCTGGCCACACCCCTATATTTCGCACATCTTCATTACCTCCACTA
GACTGGCCTTTACCAGCTCATTTTGGACAATGTGAACTGAAAATAGAAGTGCAACCTAAAACTCATCATC
GAGCCCATTATGAAACTGAAGGTAGCCGAGGGGCAGTAAAAGCATCTACTGGGGGACATCCTGTTGTGAA
GCTCCTGGGCTATAACGAAAAGCCAATAAATCTACAAATGTTTATTGGGACAGCAGATGATCGATATTTA

View online »

CGACCTCATGCATTTTACCAGGTGCATCGAATCACTGGGAAGACAGTCGCTACTGCAAGCCAAGAGATAA
TAATTGCCAGTACAAAAGTTCTGGAAATTCCACTTCTTCCTGAAAATAATATGTCAGCCAGTATTGATTG
TGCAGGTATTTTGAAACTCCGCAATTCAGATATAGAACTTCGAAAAGGAGAAACTGATATTGGCAGAAAG
AATACTAGAGTACGACTTGTGTTTCGTGTACACATCCCACAGCCCAGTGGAAAAGTCCTTTCTCTGCAGA
TAGCCTCTATACCCGTTGAGTGCTCCCAGCGGTCTGCTCAAGAACTTCCTCATATTGAGAAGTACAGTAT
CAACAGTTGTTCTGTAAATGGAGGTCATGAAATGGTTGTGACTGGATCTAATTTTCTTCCAGAATCCAAA
ATCATTTTTCTTGAAAAAGGACAAGATGGACGACCTCAGTGGGAGGTAGAAGGGAAGATAATCAGGGAAA
AATGTCAAGGGGCTCACATTGTCCTTGAAGTTCCTCCATATCATAACCCAGCAGTTACAGCTGCAGTGCA
GGTGCACTTTTATCTTTGCAATGGCAAGAGGAAAAAAAGCCAGTCTCAACGTTTTACTTATACACCAGTT
TTGATGAAGCAAGAACACAGAGAAGAGATTGATTTGTCTTCAGTTCCATCTTTGCCTGTGCCTCATCCTG
CTCAGACCCAGAGGCCTTCCTCTGATTCAGGGTGTTCACATGACAGTGTACTGTCAGGACAGAGAAGTTT
GATTTGCTCCATCCCACAAACATATGCATCCATGGTGACCTCATCCCATCTGCCACAGTTGCAGTGTAGA
GATGAGAGTGTTAGTAAAGAACAGCATATGATTCCTTCTCCAATTGTACACCAGCCTTTTCAAGTCACAC
CAACACCTCCTGTGGGGTCTTCCTATCAGCCTATGCAAACTAATGTTGTGTACAATGGACCAACTTGTCT
TCCTATTAATGCTGCCTCTAGTCAAGAATTTGATTCAGTTTTGTTTCAGCAGGATGCAACTCTTTCTGGT
TTAGTGAATCTTGGCTGTCAACCACTGTCATCCATACCATTTCATTCTTCAAATTCAGGCTCAACAGGAC
ATCTCTTAGCCCATACACCTCATTCTGTGCATACCCTGCCTCATCTGCAATCAATGGGATATCATTGTTC
AAATACAGGACAAAGATCTCTTTCTTCTCCAGTGGCTGACCAGATTACAGGTCAGCCTTCGTCTCAGTTA
CAACCTATTACATATGGTCCTTCACATTCAGGGTCTGCTACAACAGCTTCCCCAGCAGCTTCTCATCCCT
TGGCTAGTTCACCGCTTTCTGGGCCACCATCTCCTCAGCTTCAGCCTATGCCTTACCAATCTCCTAGCTC
AGGAACTGCCTCATCACCGTCTCCAGCCACCAGAATGCATTCTGGACAGCACTCAACTCAAGCACAAAGT
ACGGGCCAGGGGGGTCTTTCTGCACCTTCATCCTTAATATGTCACAGTTTGTGTGATCCAGCGTCATTTC
CACCTGATGGGGCAACTGTGAGCATTAAACCTGAACCAGAAGATCGAGAGCCTAACTTTGCAACCATTGG
TCTGCAGGACATCACTTTAGATGATGACCAATTTATATCTGACTTGGAACACCAGCCATCAGGTTCAGCA
GAGAAATGGCCTAACCACAGTGTGCTCTCATGTCCAGCTCCTTTCTGGAGAATC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC212523 representing NM_004555
Red=Cloning site Green=Tags(s)

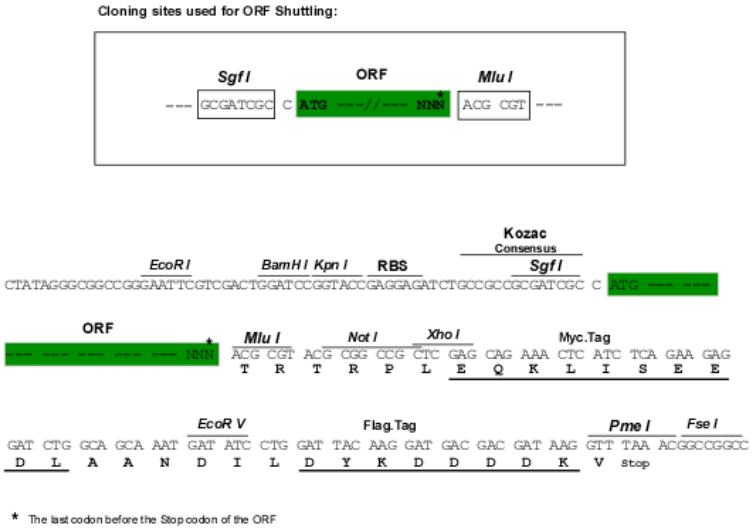
MTTANCGAHDELDFKLVFGEDGAPAPPPPGSRPADLEPDDCASIYIFNVDPPPSTLTTPLCLPHHGLPSH
SSVLSPSFQLQSHKNYEGTCEIPESKYSPLGGPKPFECPSIQITSISPNCHQELDAHEDDLQINDPEREF
LERPSRDHLYLPLEPSYRESSLSPSPASSISSRSWFSDASSCESLSHIYDDVDSELNEAAARFTLGSPLT
SPGGSPGGCPGEETWHQQYGLGHSLSPRQSPCHSPRSSVTDENWLSPRPASGPSSRPTSPCGKRRHSSAE
VCYAGSLSPHHSPVPSPGHSPRGSVTEDTWLNASVHGGSGLGPAVFPFQYCVETDIPLKTRKTSEDQAAI
LPGKLELCSDDQGSLSPARETSIDDGLGSQYPLKKDSCGDQFLSVPSPFTWSKPKPGHTPIFRTSSLPPL
DWPLPAHFGQCELKIEVQPKTHHRAHYETEGSRGAVKASTGGHPVVKLLGYNEKPINLQMFIGTADDRYL
RPHAFYQVHRITGKTVATASQEIIIASTKVLEIPLLPENNMSASIDCAGILKLRNSDIELRKGETDIGRK
NTRVRLVFRVHIPQPSGKVLSLQIASIPVECSQRSAQELPHIEKYSINSCSVNGGHEMVVTGSNFLPESK
IIFLEKGQDGRPQWEVEGKIIREKCQGAHIVLEVPPYHNPAVTAAVQVHFYLCNGKRKKSQSQRFTYTPV
LMKQEHREEIDLSSVPSLPVPHPAQTQRPSSDSGCSHDSVLSGQRSLICSIPQTYASMVTSSHLPQLQCR
DESVSKEQHMIPSPIVHQPFQVTPTPPVGSSYQPMQTNVVYNGPTCLPINAASSQEFDSVLFQQDATLSG
LVNLGCQPLSSIPFHSSNSGSTGHLLAHTPHSVHTLPHLQSMGYHCSNTGQRSLSSPVADQITGQPSSQL
QPITYGPSHSGSATTASPAASHPLASSPLSGPPSPQLQPMPYQSPSSGTASSPSPATRMHSGQHSTQAQS
TGQGGLSAPSSLICHSLCDPASFPPDGATVSIKPEPEDREPNFATIGLQDITLDDDQFISDLEHQPSGSA
EKWPNHSVLSCPAPFWRI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6291_f01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004555

ORF Size: 3204 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_004555.4

RefSeq Size: 4005 bp

RefSeq ORF: 3207 bp

Locus ID: 4775

UniProt ID: Q12968

Cytogenetics: 16q22.1

Domains: RHD, IPT

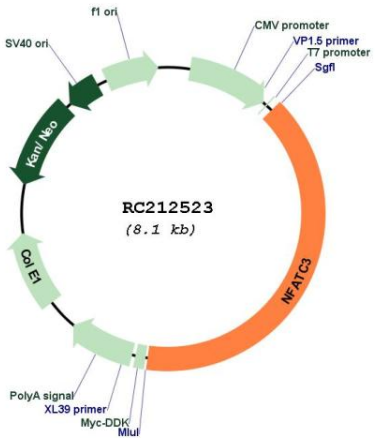
Protein Families: Druggable Genome, Transcription Factors

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

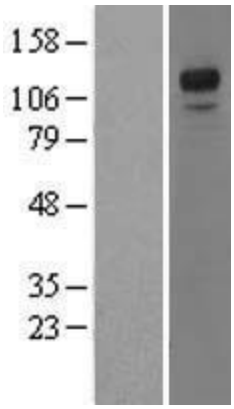
MW: 115.1 kDa

Gene Summary: The product of this gene is a member of the nuclear factors 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. Other members of this family participate to form this complex also. The product of this gene plays a role in the regulation of gene expression in T cells and immature thymocytes. Several transcript variants encoding distinct isoforms have been identified for this gene. [provided by RefSeq, Nov 2010]

Product images:



Circular map for RC212523



Western blot validation of overexpression lysate (Cat# [LY417912]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212523 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).