

## Product datasheet for **MR225714**

### **Nfatc2 (NM\_010899) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Nfatc2 (NM_010899) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Nfatc2
Synonyms:	AI607462; NF-ATc2; NF-ATp; NFAT1; NFAT1-D; Nfatp
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide  
Sequence:

>MR225714 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCCGGATCGCC

ATGGACGTCCCGAGCCGCAGCCGACCCCGATGGCGGGACGGCCCCGCCACGAGCCGGGGCAGTC  
 CCCAAGACGAGCTGGACTTTCCATCCTCTCGATTATGACTATCTGAACCCTATCGAAGAAGAACCGAT  
 CGCACATAAGGCCATCAGCTCACCTCCGGACTCGCATACCCGGATGATGTCCTGGACTATGGCCTCAAG  
 CCATGCAACCCCTTGCCAGTCTCTCTGGCGAGCCCCCTGGCCGGTTCGGAGAGCCGGATAGTATAGGGT  
 TCCAGAACTTTCTGAGCCGGTCAAGCCAGCAGGGGCTTCGGGCCGAGCCCTCGGATCGAGATCACTCC  
 ATCCCACGAACTGATGCAGGCAGGGGGGCCCTCCGTGGGAGAGACGCCGGCCTGTCCCCGAGCAGCCG  
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 GCGAGCCGCTTTGCTTGAGCCCCGCTAGCAGCGGCTCCTCTGCCAGTTCATTTCTGACACCTTCTCCCC  
 CTACACCTCGCCCTGCGTCTCACCAATAACGCCGGGCCGACGACCTGTGTCCCGAGTTTCAAACATC  
 CCTGCTCATTATCCCCCAGAACCTCTCCAATAATGTCACCTCGAACCAGCCTCGCCGAGGACAGCTGCC  
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 GGAGTCCAAGGTTGTGTTTCATGGAGAAGACTACAGATGGGCAGCAGATTTGGGAGATGGAAGCTACGGT  
 GATAAAGACAAGAGCCAGCCTAACATGCTTTTTGTTGAGATCCCCGAGTATCGGAACAAGCACATCCGCG  
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 GGAAGCTCTGCCACGGAGTGACCGTCAAACAGGAACAGAACCTGGACCAGACCTACCTGGATGACGTT  
 AATGAAATCATCAGGAAGGAGTTTTTCAGGACCTCCCTCCGAAATCAGACC

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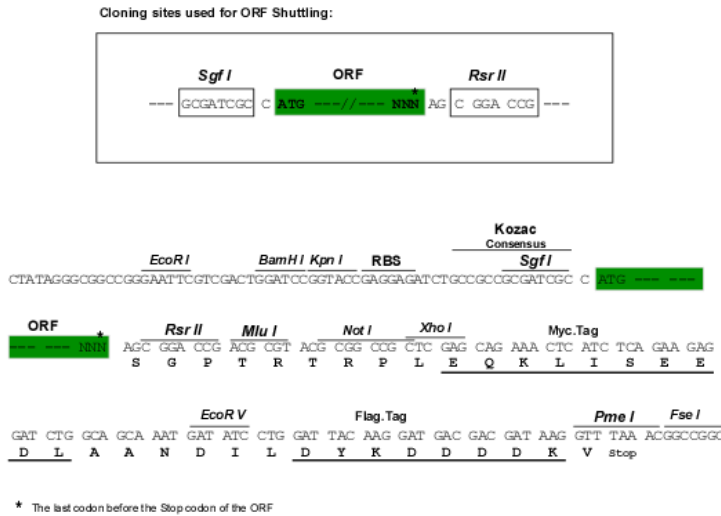
**Protein Sequence:** >MR225714 protein sequence  
Red=Cloning site Green=Tags(s)

MDVPEPQPPDGGDGPHEPGGSPQDELDF SILFDYDYLNPIDEEPIAHKAISSPSGLAYPDDVLDYGLK  
 PCNPLASLSGEPGRFGEPDSIGFQNF LSPVKPAGASGSPRIEITPSHELMQAGGALGRDAGLSPEQP  
 ALALAGVAASPRFTLPVPGYEGYREPLCLSPASSGSSASFISDTFSPYTPCVSPNAGPDDLCPQFQNI  
 PAHYSPTSPIMSPRTSLAEDSCLGRHSPVPRPASRSSSPGAKRRHSCEALVAPLPAASQRSRSPSPQ  
 PSHVALQDDSI PAGYPPTAGSAV LMDALNTLATDSPCGIPSKIWKTS PDTPVSTAPSKAGLARHIYPT  
 VEFLGPEQEERRNSAPESILLVPPTWPKQLVPAIPICIPVTASLPLEWPLSNQSGSYELRIEVQPKP  
 HHRAYETEGSRGAVKAPTGGHPVVQLHGYMENKPLGLQIFIGTADERILKPHAFYQVHRITGKTVTTTS  
 YEKIVGNTKVLEIPLPKNNMRATIDCAGILKLRNADIELRKGETDIGRKNTRVRLVFRVHVPEPSGRIV  
 SLQAASNPIECSQSAHELPMVERQDMDSCLVYGGQQMILTGQNF TAESKVVFMKTTDGGQIWE MEATV  
 DKDKSQPNMLFVEIPEYRNKHIRVPVKVNFYVINGKRKRSQPQHFTYHPVPAIKTEPSDEYEPSLICSPA  
 HGGLGSQPPYPQHPMLAESPCLVATMAPCQQFRSGLSSPDARYQQQSPAALYQRSKLSPGLLGYQQP  
 SLLAAPLGLADAHRSVLVHAGSQGGQGSTLPHTSSASQASPVIHYSPTNQLRGGGHQEFQHIMYCEN  
 FGPSSARPGPPPINQQQLSPGAYPTVIQQQTAPSQRAAKNGPSDQKEALPTGVTVKQEQLNDQTYLDDY  
 NEIIRKEFSGPPSRNQT

SGPTRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-RsrII

**Cloning Scheme:**



**ACCN:** NM\_010899

**ORF Size:** 2781 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](mailto: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:**

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\\_010899.3](#)

**RefSeq Size:** 6759 bp

**RefSeq ORF:** 2784 bp

**Locus ID:** 18019

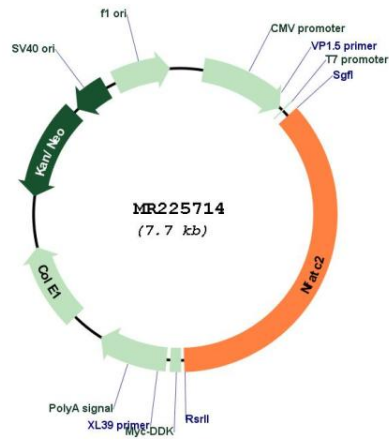
**UniProt ID:** [Q60591](#)

**Cytogenetics:** 2 88.91 cM

**MW:** 100 kDa

**Gene Summary:** Plays a role in the inducible expression of cytokine genes in T-cells, especially in the induction of the IL-2, IL-3, IL-4, TNF-alpha or GM-CSF. Promotes invasive migration through the activation of GPC6 expression and WNT5A signaling pathway.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR225714