

Product datasheet for **MC204560**

Nfatc4 (NM_023699) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nfatc4 (NM_023699) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Nfatc4
Synonyms:	3110041H08Rik; AW107667; AW546455; Nfat3
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >BC028928
 GGCGGGACCTGGGGGCTCCGGCCGATCCATGGGGCCGCAAGCTGCGAGGATGAGGAGCTGGAATTTAA
 GCTGGTGTTCGGAGAGGAAAAGGAGCCCCCCCCCTGGGCCCTGGGGTCTGGGGAAGAGCTGGACTCA
 GAGGATACCCCTCCATGCTGTCTTTGGCCCTGGGGGAACCCCTTCTTATGGTGTGCCCTATTGGGA
 TTCCCCGACCCCCACCCCTCGGCCAGGGATGCACTCACCACCCCGTCCC GCCCTTACCTGGCAC
 CTGGGAGAGCCAGCCAGTAGGTCTGAGGCTGGGGGGCCAGGAGTAATGCAGGGGTGCTGGGGT
 GTTCGTGTTCTTGTAGTGTCCAGCATCCGATTACCTCCATCTCTCCACGCCTGACCCGCCACCTCGC
 TAGAGGACTCCTGAACTTGGGGGACGGCTCCTAGAGATTACCCTCCACCAGAAGGCTTTGGGG
 CTATCGAGAGGCTGGAGGTGAGGCGGAGGCGCCTTCTCAGCCGAGCCCTGGCAGCAGCAGCTGTCT
 TCTTGGAGCTTCTTCTCGGACGCCTCCGACGAGGCAGCCCTGTATGCAGCGTGGCAGAGGTGGAGTCTG
 AACTTAATGAAGCAGCCTCCCGTTTTGGCTTGTAGCTCTCCGCTGCCCTCGCCCGGGCTTCTCTAGGCC
 ATGGACCCCGGAGGATCCCTGGAGCCTATACGGTCCAAGCTCGGGAGGCCGAGGCCAGAGGATAGCTGG
 CTACTCCTCAGCGCTCCTGGGCCGTCCAGCCTCCCCTCGGCCTGCTTCTCCCTGCGGCAAGCGGCCT
 ATTCCAGTTCGGAACCCATCTTCGGCCTCCCAGCTTTGTCCCGCCGAGGCAGCCTTGGAGAAGAAGG
 TCCAGAGCCACCTCCACCACCCCGTTGCCTCTGGTCCGGGACCTAGTCCCCTGGCCCTTTGACTAT
 GTGGGTGCTCCACCAACCGAGAGCATCCCTCAGAAAACCGAGGACTTCTAGCGAGCAAGCAGTGGCC
 TGCCCTCGGTCTGAAGAGCCTCCCTCGTGAATGGGAAGCTCCCCTCCGGTACAGAGGACTCTGTGGTGC
 TCCGGGGCTCTGCGGAAAGAGGTGGCCGGCATGGATTACCTAGCAGTGCCTTCTCCCCTGCTTGGTCC
 AAGGCCCGGATTGGGGACACAGCCCCATCTTCAGGACCTCTGCCCTACCTCCCCTGGACTGGCCTTTAC
 CCAGCCAGTATGAGCAGCTGGAGCTGAGGATCGAGGTACAGCCTAGAGCACACCACCGAGCTCACTATGA
 GACTGAGGGCAGCCGGGGGCTGTCAAGGCTGCTCCTGGAGGCCACCCTGTGGTCAAGCTCCTAGGCTAC
 AGTGAGAAGCCATTGACTCTGCAGATGTTCAATGGCACTGCAGATGAGAGGAGCCTGCGGCCCATGCCT
 TCTACCAGTGCACCCGATTACTGGCAATGGTGGCTACAGCCAGCTATGAAGCTGTAGTCAGTGGTAC
 CAAAGTGTGGAGATGACCTTGTCTCCAGAGAACAACATGGCTGCCAACATTGACTGTGCTGGAATCCTG
 AAGCTTCGAAATTCAGACATTGAGCTACGGAAGGTTGAGACAGACATCGGGCGCAAAAACACGCGTGTGC
 GGCTGGTGTTCGGTGTGCACGTGCCTCAGGGCAGCGGGAAGTCTGTGTGTGCAGGCAGCATCAGTGCC
 CATCGAGTGTCCAGCGCTCTGCCAGGAGCTGCCCCAGGTGGAGACCTACAGCCCCAGTGCCTGCTCT
 GTGAGAGGAGGGGAGGAGCTAGTGTGACTGGTCCAACCTCCTGCCAGACTCTAAAGTGGTGTTCATTG
 AGAGGGTCTGTATGGAAAACGAGTGGGAGGAAGAGGGCGGTTGAACCGGCTGCAGAGCAGTGAAGT
 GACATTGACTCTACCATCCCCGAGTACAGCAACAAGCGGGTGTCCCGACCAGTCCAGGTCTACTTTTAC
 GTCTCCAATGGACGGAGGAAGCGCAGTCTACCCAAAGTTTCAAGTTCCTACCTGTGGTCTTCAAGGAGG
 AGCCCCCTACCAGACTCATCTCTCCGGGGCTTCCCTTCCACATCGGGTCCCCCTTTGGCCCTGACGTGGA
 CTTCTCACCGCCAGGCCCTTACCCCTCCTATCCCCATGAAGACCCTGCTTATGAGACTCCTTATCTG
 TCAGAAGGCTTTGGTTATAGCACACCCGCTCTGTACCCCCAGACGGGGCCCCACCGTCTATAGATCTG
 GCCTGCGGATGTTCCCTGAGACTGGGGTACCACAGGTTGTGCCCGCCTACCTTCAGTCTCTTCTCTCC
 GCGCCCTTTCTGGTGTCAATATGGAGGACAGGGCTCCTCTTTTGGCCCTGGGGCTTCCATTCTCCCCT
 CCAGCCCCCTTAGGCCGCACTGCCTTCTCCCACCACTCGAAGACCCTTCCATCCCCAGAGTGCCA
 TCCACCCCTTACCTCTGAGGGCTACAATGAGGTGGGGCCAGGCTATACCCTGGGGAGGGGCTTCGGA
 GCAGGAGAAAGCCAGGGTGGCTACAGCAGCGGCTTACAGACAGTGTACCTATCCAGGATCACCCCTG
 GAGGAAGTGAGTGAGATCATTGGCCGAGACCTGAGTGGCTTCCCTGCACGCTCTGGAGAAGAGCCTCTG
 CCTGAACCACATGTAGTGGTCCCGAAGCCCCACCGCCTTGCCTCTTAACTGGGGTGTGGCTCCAGAA
 GCTTGGGGCAACTCTAGTTTCTCCTAGCCAGCTTCTAGCTTCTGTTTTCCCTTTCTCTCCAGCAAA
 GGTGTGGCCCCAGGCCTGGTGTGCCTTGGAAAGGACTAAGGGTGTGGGGACAGGGGATGAGGGTGA
 GCCTGAGGCTGGAGGCCAGAACTGACTGGGCTGAACATGATGTCTGATCGTGCAGGCCGTGATGCTAAC
 AAGCTGGACAGGTTGATGGGTAATAAACTGCTCGCTGACCAGTGAAAAAAAAAAAAAAAAAAAAAA

Restriction Sites: RsrII-NotI
ACCN: NM_023699
Insert Size: 2706 bp

OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	BC028928 , AAH28928
RefSeq Size:	3075 bp
RefSeq ORF:	2706 bp
Locus ID:	73181
UniProt ID:	Q8K120
Cytogenetics:	14 C3

Gene Summary:

Ca(2+)-regulated transcription factor that is involved in several processes, including the development and function of the immune, cardiovascular, musculoskeletal, and nervous systems. Involved in T-cell activation, stimulating the transcription of cytokine genes, including that of IL2 and IL4 (PubMed:17198697). Along with NFATC3, involved in embryonic heart development (PubMed:12750314, PubMed:17198697). Involved in mitochondrial energy metabolism required for cardiac morphogenesis and function (PubMed:12750314). Transactivates many genes involved in heart physiology. Along with GATA4, binds to and activates NPPB/BNP promoter (PubMed:9568714). Activates NPPA/ANP/ANF and MYH7/beta-MHC transcription (By similarity). Binds to and transactivates AGTR2 gene promoter (PubMed:17198697). Involved in the regulation of adult hippocampal neurogenesis. Involved in BDNF-driven pro-survival signaling in hippocampal adult-born neurons. Involved in the formation of long-term spatial memory and long-term potentiation (PubMed:22586092). In cochlear nucleus neurons, may play a role in deafferentation-induced apoptosis during a developmental critical period when auditory neurons depend on afferent input for survival (PubMed:18354019). Binds to and activates the BACE1/Beta-secretase 1 promoter, hence may regulate the proteolytic processing of the amyloid precursor protein (APP). Plays a role in adipocyte differentiation. May be involved in myoblast differentiation into myotubes (By similarity). Binds the consensus DNA sequence 5'-GGAAAAT-3' (Probable). In the presence of CREBBP, activates TNF transcription. Binds to PPARG gene promoter and regulates its activity (By similarity). Binds to PPARG and REG3G gene promoters (PubMed:17198697).

[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) encodes the longer isoform (1).