

## Product datasheet for **SC306788**

### NFAT1 (NFATC2) (NM\_173091) Human Untagged Clone

#### Product data:

|                           |                                                 |
|---------------------------|-------------------------------------------------|
| Product Type:             | Expression Plasmids                             |
| Product Name:             | NFAT1 (NFATC2) (NM_173091) Human Untagged Clone |
| Tag:                      | Tag Free                                        |
| Symbol:                   | NFAT1                                           |
| Synonyms:                 | NFAT1; NFATP                                    |
| Mammalian Cell Selection: | None                                            |
| Vector:                   | <u><a href="#">pCMV6-XL5</a></u>                |
| E. coli Selection:        | Ampicillin (100 ug/mL)                          |

**Fully Sequenced ORF:** >OriGene ORF sequence for NM\_173091 edited  
AGCAGGAAGCTCGCGCCCGCTCGCCGCGCCGCTCAGCTTCCCCGGGCGCGTCCAGGAC  
CCGCTGCGCCAGGCGCGCGTCCCCGGACCCGGCGTGCCTCCACGAGGAAAGGGACCC  
CGCCGCTCGAGCCGCTCCGCCAGCCCACTGCGAGGGTCCCAGAGCCAGCCGCGCCCG  
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GAGCCAGTCTTGGGCAGAGGCTGTACATTTAGGCAGATTGGAAGTTGGTATGTTCTAAT
TCTCACTCTGGACTACAGTGAGGCTGAATTTATCATGTCAAAAAAAAAAAAAAAAAAAAA

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- Restriction Sites:** Please inquire
- ACCN:** NM\_173091
- Insert Size:** 3100 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).
- OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
- 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\\_173091.2](#), [NP\\_775114.1](#)

**RefSeq Size:** 3166 bp

**RefSeq ORF:** 2778 bp

**Locus ID:** 4773

**UniProt ID:** [Q13469](#)

**Cytogenetics:** 20q13.2

**Protein Families:** Druggable Genome, Transcription Factors

**Protein Pathways:** Axon guidance, B cell receptor signaling pathway, MAPK signaling pathway, Natural killer cell mediated cytotoxicity, T cell receptor signaling pathway, VEGF signaling pathway, Wnt signaling pathway

**Gene Summary:** This gene is a member of the nuclear factor of activated T cells (NFAT) family. The product of this gene is a DNA-binding protein with a REL-homology region (RHR) and an NFAT-homology region (NHR). This protein is present in the cytosol and only translocates to the nucleus upon T cell receptor (TCR) stimulation, where it becomes a member of the nuclear factors of activated T cells transcription complex. This complex plays a central role in inducing gene transcription during the immune response. Alternate transcriptional splice variants encoding different isoforms have been characterized. [provided by RefSeq, Apr 2012]  
Transcript Variant: This variant (2) encodes the longest isoform (C). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.