

Product datasheet for SC120670

NFAT5 (NM_138714) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NFAT5 (NM_138714) Human Untagged Clone
Tag:	Tag Free
Symbol:	NFAT5
Synonyms:	NF-AT5; NFATL1; NFATZ; OREBP; TONEBP
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC120670 sequence for NM_138714 edited (data generated by NextGen Sequencing)

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ATGGGCGGTGCTTCAGCTCCTTTACCACCTCTTCCAGCCCTACCATTTATTCTACCTCA
GTCACCGACAGCAAGGCTATGCAAGTGGAGAGCTGCTCCTCAGCCGTGGGGTAAGTAAC
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 CTTGTTTTATTGCAAAACCAAGGGAACAACCTTGACTGGCTCCTTTTAA

Clone variation with respect to NM_138714.3

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_138714 unedited
 CCACGCCATTGCGACGAGCTCTCCTGGTCTCCGAGAATCAGTCCCCGTGGAGTTCCTCCCT
 CCACCTCGCCATCGTTTCCTCGGTCTCGGCCAGTGGAACTACTACCTCGAGGAGGA
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 GCTGCCATGCCCTCGGACTTCATCTTATTGCTCAGCGCGGACCTAGACCTGGAATCGCCC
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 CTTGTACATCTTACCCCTCGGAGAACTTGCTGGATAACAGTCGGATGCTCCTGCCCGGA
 AGAGGGGTGTGNTTTGG

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_138714 unedited
 CTATGGACCGCGCAGCAATCTAAGATCGAGTTTTTTTTTTTTTTTTTTTAAATAAAATT
 TATACTCGTTTCTATTAGGAGGAAAAATTTGAAGACTTCAGAACAGCACCGTTTCATGG
 GGAAAAATGTGTTGTTTCTCAGGAATCAACTCCTAATAATTCCTAAGACAGTACTCTCTG
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 GTAGAAACCCAGAGAACTAACAACCTCTGAAAAAATAAATCAAGAAGCATTCCAGCTG
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 TATTGAACCTTCTTTTTACAAGCCCTTACTTGGCTAAAACCTTTGCCGAAACGAAAT
 ACTGGATACACCACCCACCTCATTTTTTTTTTTTTTAAATACCACACTACCTCGAGGGCCC
 CCCCTTATATAAACCCGCCCTCAAGGCAATTGCCCTATGTAACACCATCCTCTAAT
 CCTTGCCGCGGTAACCAATAATTCTCCGCTCCTCTCCTTTCGCATCTACATTGGCAAT
 CTTCCCTGGCGGTTATACTCTCCCTCCCCACCG

Restriction Sites:

NotI-NotI

ACCN:

NM_138714

Insert Size:

6730 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](#)

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_138714.2](#), [NP_619728.2](#)

RefSeq Size: 14239 bp

RefSeq ORF: 4368 bp

Locus ID: 10725

UniProt ID: [O94916](#)

Cytogenetics: 16q22.1

Domains: 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

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]

Transcript Variant: This variant (1) represents the longest transcript. This variant and variants 4 and 5 encode the same isoform (a). 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.