

Product datasheet for RC215180L2

OriGene Technologies, Inc.

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NFAT1 (NFATC2) (NM 012340) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: NFAT1 (NFATC2) (NM_012340) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: NFAT1

Synonyms: NFAT1; NFATP

Mammalian Cell None

Selection:

Vector: pLenti-C-mGFP (PS100071)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide

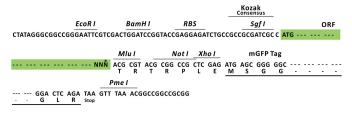
The ORF insert of this clone is exactly the same as(RC215180).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





st The last codon before the Stop codon of the ORF.

ACCN: NM_012340

ORF Size: 2763 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. <u>More info</u>

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:

Cytogenetics:

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: <u>NM 012340.3</u>

 RefSeq Size:
 3254 bp

 RefSeq ORF:
 2766 bp

 Locus ID:
 4773

 UniProt ID:
 Q13469

Protein Families: Druggable Genome, Transcription Factors

20q13.2

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

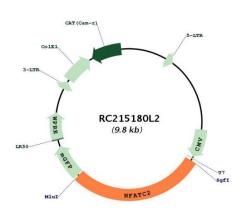
MW: 99.6 kDa



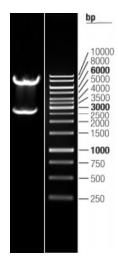
Gene Summary:

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]

Product images:



Circular map for RC215180L2



Double digestion of RC215180L2 using Sgfl and Mlul