

Datasheet for ABIN3094128

NFAT5 Protein (AA 1-1531) (Strep Tag)**1** Image[Go to Product page](#)

Overview

Quantity:	1 mg
Target:	NFAT5
Protein Characteristics:	AA 1-1531
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This NFAT5 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	MPSPDFISLLS ADLDLESPKS LYSRESVYDL LPKELQLPPS RETSVASMSQ TSGGEAGSPP PAVVAADASS APSSSSMGGG CSSFTTSSSP TIYSTSVTDS KAMQVESCSS AVGVSNRGVS EKQLTSNTVQ QHPSTPKRHT VLYISPPPED LLDNSRMSCQ DEGCGLSESEQ SCSMWMEDSP SNFSNMSTSS YNDNTEVPRK SRKRNPQKRP GVKRRDCEES NMDIFDADSA KAPHYVLSQL TTDNKGNSKA GNGTLENQKG TGVKKSPMLC GQYPVKSEGG ELKIVVQPET QHRARYLTEG SRGSVKDRDQ QGFPTVKLEG HNEPVVLQVF VGNDSGRVKP HGFYQACRVT GRNTTPCKEV DIEGTTVIEV GLDPSNNMTL AVDCVGILKL RNADVEARIG IAGSKKKSTR ARLVFRVNIM RKDGSTLTQ TPSSPILCTQ PAGVPEILKK SLHSCSVKGE EEVFLIGKNF LKGTKVIFQE NVSDENSWKS EAEIDMELFH QNHLIVKVPP YHDQHITLPV SVGIYVVTNA GRSHDVQPFT YTPDPAAAGA LNVNVKKEIS SPARPCSFEE AMKAMKTTGC NLDKVNIIPN ALMTPLIPSS MIKSEDTVPM EVTAEKRSST IFKTTKSVGS TQQTLENISN IAGNGSFSSP SSSHLPSENE KQQQIQPKAY NPETLTTIQT QDISQPGTFP AVSASSQLPN SDALLQATQ FQTRETQSRE
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ILQSDGTVVN LSQLTEASQQ QQQSPLQEQA QTLQQQISSN IFSPNSVSQ LQNTIQQQLQA
GSFTGSTASG SSGSVDLVQQ VLEAQQQLSS VLFSAPDGNE NVQEQLSADI FQQVSIQSG
VSPGMFSSTE PTVHTRPDNL LPGRAESVHP QSENTLSNQQ QQQQQQQQVM ESSAAMVMEM
QQSICQAAAQ IQSELFSTA SANGNLQQSP VYQQTSHMMS ALSTNEDMQM QCELFSSPPA
VSGNETSTTT TQQVATPGTT MFQTSSSGDG EETGTQAKQI QNSVFQTMVQ MQHSGDNQPQ
VNLFSSTKSM MSVQNSGTQQ QGNGLFQQGN EMMSLQSGNF LQQSSHSQAQ LFHPQNPIAD
AQNLSQETQG SLFHSPNPV HSQTSTTSSE QMQPPMFHSQ STIAVLQGSS VPQDQQSTNI
FLSQSPMNNL QTNTVAQEAF FAAPNSISPL QSTSNSEQQA AFQQQAPISH IQTPMLSQEQ
AQPPQQGLFQ PQVALGSLPP NPMPQSQQGT MFQSQHSIVA MQSNSPSQEQ QQQQQQQQQQ
QQQQQQSILF SNQNTMATMA SPKQPPPNMI FNPQNPMAN QEQQNQSIFH QQSNMAPMNQ
EQQPMQFQSQ STVSSLQNPQ PTQSESSQTP LFHSSPQIQL VQGSPSSQEQ QVTLFLSPAS
MSALQTSINQ QDMQQSPLYS PQNNMPGIQG ATSSPQPQAT LFHNTAGGTM NQLQNSPGSS
QQTSGMFLFG IQNNCSQLLT SGPATLPDQL MAISQPGQPQ NEGQPPVTTL LSQQMPENSP
LASSINTNQNI IEKIDLLVSL QNQGNLTGS F

Sequence without tag. The proposed Strep-Tag is based on experience s with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.

Characteristics:

Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified by multi-step, protein-specific process to ensure correct folding and modification.
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a **made-to-order protein** and will be made for the first time for your order. Our experts in the lab will ensure that you receive a correctly folded protein.

The big advantage of ordering our **made-to-order proteins** in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.

Product Details

- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®): 1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. Eluate fractions are analyzed by SDS-PAGE. 2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)
Grade:	Crystallography grade

Target Details

Target:	NFAT5
Alternative Name:	NFAT5 (NFAT5 Products)
Background:	Nuclear factor of activated T-cells 5 (NF-AT5) (T-cell transcription factor NFAT5) (Tonicity-responsive enhancer-binding protein) (TonE-binding protein) (TonEBP),FUNCTION: Transcription factor involved, among others, in the transcriptional regulation of osmoprotective and inflammatory genes. Binds the DNA consensus sequence 5'-[ACT][AG]TGGAAG[CAT]A[TA][ATC][CA][ATG][GT][GAC][CG][CT]-3' (PubMed:10377394). Mediates the transcriptional response to hypertonicity (PubMed:10051678). Positively regulates the transcription of LCN2 and S100A4 genes, optimal transactivation of these genes requires the

Target Details

presence of DDX5/DDX17 (PubMed:22266867). Also involved in the DNA damage response by preventing formation of R-loops, R-loops are composed of a DNA:RNA hybrid and the associated non-template single-stranded DNA (PubMed:34049076).
{ECO:0000269|PubMed:10051678, ECO:0000269|PubMed:10377394, ECO:0000269|PubMed:22266867, ECO:0000269|PubMed:34049076}.

Molecular Weight: 165.8 kDa

UniProt: [O94916](#)

Pathways: [RTK Signaling](#), [WNT Signaling](#)

Application Details

Application Notes: In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Comment: ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.

During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer. If you have a special request, please contact us.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Handling

Expiry Date: Unlimited (if stored properly)

Images



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process