Datasheet for ABIN3094115

NFAT1 Protein (AA 1-925) (Strep Tag)

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1 Image

Overview

Quantity:	1 mg
Target:	NFAT1
Protein Characteristics:	AA 1-925
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This NFAT1 protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA

Product Details

Sequence:	MNAPERQPQP DGGDAPGHEP GGSPQDELDF SILFDYEYLN PNEEEPNAHK VASPPSGPAY PDDVLDYGLK PYSPLASLSG EPPGRFGEPD RVGPQKFLSA AKPAGASGLS PRIEITPSHE LIQAVGPLRM RDAGLLVEQP PLAGVAASPR FTLPVPGFEG YREPLCLSPA SSGSSASFIS DTFSPYTSPC VSPNNGGPDD LCPQFQNIPA HYSPRTSPIM SPRTSLAEDS CLGRHSPVPR PASRSSSPGA KRRHSCAEAL VALPPGASPQ RSRSPSPQPS SHVAPQDHGS PAGYPPVAGS AVIMDALNSL ATDSPCGIPP KMWKTSPDPS PVSAAPSKAG LPRHIYPAVE FLGPCEQGER RNSAPESILL VPPTWPKPLV PAIPICSIPV TASLPPLEWP LSSQSGSYEL RIEVQPKPHH RAHYETEGSR GAVKAPTGGH PVVQLHGYME NKPLGLQIFI GTADERILKP HAFYQVHRIT GKTVTTTSYE KIVGNTKVLE IPLEPKNNMR ATIDCAGILK LRNADIELRK GETDIGRKNT RVRLVFRVHI PESSGRIVSL QTASNPIECS QRSAHELPMV ERQDTDSCLV YGGQQMILTG QNFTSESKVV FTEKTTDGQQ IWEMEATVDK DKSQPNMLFV EIPEYRNKHI RTPVKVNFYV INGKRKRSQP QHFTYHPVPA IKTEPTDEYD PTLICSPTHG GLGSQPYYPQ HPMVAESPSC

LVATMAPCQQ FRTGLSSPDA RYQQQNPAAV LYQRSKSLSP SLLGYQQPAL MAAPLSLADA HRSVLVHAGS QGQSSALLHP SPTNQQASPV IHYSPTNQQL RCGSHQEFQH IMYCENFAPG TTRPGPPPVS QGQRLSPGSY PTVIQQQNAT SQRAAKNGPP VSDQKEVLPA GVTIKQEQNL DQTYLDDVNE IIRKEFSGPP ARNQT

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.
- 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.

Product Details

- 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:	NFAT1
Alternative Name:	NFATC2 (NFAT1 Products)
Background:	Nuclear factor of activated T-cells, cytoplasmic 2 (NF-ATc2) (NFATc2) (NFAT pre-existing subunit) (NF-ATp) (T-cell transcription factor NFAT1),FUNCTION: Plays a role in the inducible expression of cytokine genes in T-cells, especially in the induction of the IL-2, IL-3, IL-4, TNF-alpha or GM-CSF (PubMed:15790681). Promotes invasive migration through the activation of GPC6 expression and WNT5A signaling pathway (PubMed:21871017). Is involved in the negative regulation of chondrogenesis (PubMed:35789258). {ECO:0000269|PubMed:15790681, ECO:0000269|PubMed:21871017, ECO:0000269|PubMed:35789258}.
Molecular Weight:	100.1 kDa
UniProt:	Q13469
Pathways:	RTK Signaling, WNT Signaling, Fc-epsilon Receptor Signaling Pathway, VEGF Signaling, BCR 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.

Application Details

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.
Expiry Date:	Unlimited (if stored properly)

Images

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