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Datasheet for ABIN3093091
NFKBIZ Protein (AA 1-718) (Strep Tag)

Overview

Quantity:	1 mg
Target:	NFKBIZ
Protein Characteristics:	AA 1-718
Origin:	Human
Source:	Tobacco (<i>Nicotiana tabacum</i>)
Protein Type:	Recombinant
Purification tag / Conjugate:	This NFKBIZ protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence: MIVDKLLDDS RGGGLRDAA GGCGLMTSPL NLSYFYGASP PAAAPGACDA SCSVLGPSAP
GSPGSDSSDF SSASSVSSCG AVESRSRGA RAERQPVEPH MGVGRQQRGP FQGV RVKNSV
KELLHIRSH KQKASGQAVD DFKTQGVNIE QFRELKNTVS YSGKRKGPDS LSDGPACKRP
ALLHSQFLTP PQTPTPGESM EDVHLNEPKQ ESSADLLQNI INIKNECSPV SLNTVQVSWL
NPVVVPQSSP AEQCQDFHGG QVFSPQKCQ PFQVRGSQQM IDQASLYQYS PQNQHVQQP
HYTHKPTLEY SPFPIPPQSP AYEPNFDGP ESQFCPNQSL VSLLDGQRES ENIANPMQTS
SSVQQQNDAAH LHSFSMMPSS ACEAMVGHEM ASDSSNTSLP FSNMGPMNT TQLGKSLFQW
QVEQEESKLA NISQDQFLSK DADGDFTLHI AVAQRRALS YVLARKMNAL HMLDIKEHNG
QSAFQVAVAA NQHLIVQDLV NIGAQVNTTD CWGRTPLHVC AEKGHSQVLQ AIQKGA VGSN
QFVDLEATNY DGLTPLHCAV IAHNAVVEL QRNQQPHSPE VQELLKNKS LVDTIKCLIQ
MGAAVEAKDR KSGRTALHLA AEEANLELIR LFELEPSCLS FVNAKAYNGN TALHVAASLQ
YRLTQLDAVR LLMRKGADPS TRNLENEQPV HLVPDGPVGE QIRRILKGKS IQQRAPPY

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.
- 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®):

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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)

Target Details

Target: NFKBIZ

Alternative Name: NFKBIZ ([NFKBIZ Products](#))

Background: NF-kappa-B inhibitor zeta (I-kappa-B-zeta) (IkB-zeta) (IkappaBzeta) (IL-1 inducible nuclear ankyrin-repeat protein) (INAP) (Molecule possessing ankyrin repeats induced by lipopolysaccharide) (MAIL),FUNCTION: Involved in regulation of NF-kappa-B transcription factor complexes (PubMed:16513645, PubMed:16622025). Inhibits NF-kappa-B activity without affecting its nuclear translocation upon stimulation (PubMed:16513645). Inhibits DNA-binding of RELA and NFKB1/p50, and of the NF-kappa-B p65-p50 heterodimer and the NF-kappa-B p50-p50 homodimer (PubMed:16513645). Seems also to activate NF-kappa-B-mediated transcription (PubMed:16622025). In vitro, upon association with NFKB1/p50 has transcriptional activation activity and, together with NFKB1/p50 and RELA, is recruited to LCN2 promoters (PubMed:16622025). Promotes transcription of LCN2 and DEFB4 (PubMed:16622025). Is recruited to IL-6 promoters and activates IL-6 but decreases TNF-alpha production in response to LPS (By similarity). Seems to be involved in the induction of inflammatory genes activated through TLR/IL-1 receptor signaling (By similarity). Involved in the induction of T helper 17 cells (Th17) differentiation upon recognition of antigen by T cell antigen receptor (TCR) (By similarity). {ECO:0000250|UniProtKB:Q9EST8, ECO:0000269|PubMed:16513645, ECO:0000269|PubMed:16622025}.

Molecular Weight: 78.1 kDa

UniProt: [Q9BYH8](#)

Pathways: [NF-kappaB Signaling](#)

Application Details

Application Notes: In addition to the applications listed above we expect the protein to work for functional studies

Application Details

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.

Expiry Date: Unlimited (if stored properly)