Datasheet for ABIN3096039

NFKBIL2 Protein (AA 1-1378) (Strep Tag)

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1 Image

Overview

Quantity:	1 mg
Target:	NFKBIL2
Protein Characteristics:	AA 1-1378
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This NFKBIL2 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	MSLERELRQL SKAKAKAQRA GQRREEAALC HQLGELLAGH GRYAEALEQH WQELQLRERA DDPLGCAVAH RKIGERLAEM EDYPAALQHQ HQYLELAHSL RNHTELQRAW ATIGRTHLDI YDHCQSRDAL LQAQAAFEKS LAIVDEELEG TLAQGELNEM RTRLYLNLGL TFESLQQTAL CNDYFRKSIF LAEQNHLYED LFRARYNLGT IHWRAGQHSQ AMRCLEGARE CAHTMRKRFM ESECCVVIAQ VLQDLGDFLA AKRALKKAYR LGSQKPVQRA AICQNLQHVL AVVRLQQQLE EAEGRDPQGA MVICEQLGDL FSKAGDFPRA AEAYQKQLRF AELLDRPGAE RAIIHVSLAT TLGDMKDHHG AVRHYEEELR LRSGNVLEEA KTWLNIALSR EEAGDAYELL APCFQKALSC AQQAQRPQLQ RQVLQHLHTV QLRLQPQEAP ETETRLRELS VAEDEDEEEE AEEAAATAES EALEAGEVEL SEGEDDTDGL TPQLEEDEEL QGHLGRRKGS KWNRRNDMGE TLLHRACIEG QLRRVQDLVR QGHPLNPRDY CGWTPLHEAC NYGHLEIVRF LLDHGAAVDD PGGQGCEGIT PLHDALNCGH FEVAELLLER GASVTLRTRK GLSPLETLQQ WVKLYRRDLD LETRQKARAM EMLLQAAASG QDPHSSQAFH TPSSLLFDPE TSPPLSPCPE PPSNSTRLPE ASQAHVRVSP

GQAAPAMARP RRSRHGPASS SSSSEGEDSA GPARPSQKRP RCSATAQRVA AWTPGPASNR EAATASTSRA AYQAAIRGVG SAQSRLGPGP PRGHSKALAP QAALIPEEEC LAGDWLELDM PLTRSRRPRP RGTGDNRRPS STSGSDSEES RPRARAKQVR LTCMQSCSAP VNAGPSSLAS EPPGSPSTPR VSEPSGDSSA AGQPLGPAPP PPIRVRVQVQ DHLFLIPVPH SSDTHSVAWL AEQAAQRYYQ TCGLLPRLTL RKEGALLAPQ DLIPDVLQSN DEVLAEVTSW DLPPLTDRYR RACQSLGQGE HQQVLQAVEL QGLGLSFSAC SLALDQAQLT PLLRALKLHT ALRELRLAGN RLGDKCVAEL VAALGTMPSL ALLDLSSNHL GPEGLRQLAM GLPGQATLQS LEELDLSMNP LGDGCGQSLA SLLHACPLLS TLRLQACGFG PSFFLSHQTA LGSAFQDAEH LKTLSLSYNA LGAPALARTL QSLPAGTLLH LELSSVAAGK GDSDLMEPVF RYLAKEGCAL AHLTLSANHL GDKAVRDLCR CLSLCPSLIS LDLSANPEIS CASLEELLST LQKRPQGLSF LGLSGCAVQG PLGLGLWDKI AAQLRELQLC SRRLCAEDRD ALRQLQPSRP GPGECTLDHG SKLFFRRL

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

Product Details

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:	NFKBIL2
Alternative Name:	TONSL (NFKBIL2 Products)
Background:	Tonsoku-like protein (Inhibitor of kappa B-related protein) (I-kappa-B-related protein) (IkappaBR) (NF-kappa-B inhibitor-like protein 2) (Nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor-like 2),FUNCTION: Component of the MMS22L-TONSL complex, a complex that promotes homologous recombination-mediated repair of double-strand breaks (DSBs) at stalled or collapsed replication forks (PubMed:21055983, PubMed:21055984, PubMed:21055985, PubMed:21113133, PubMed:26527279, PubMed:27797818, PubMed:29478807, PubMed:27338793, PubMed:30773278). The MMS22L-TONSL complex is required to maintain genome integrity during DNA replication (PubMed:21055983, PubMed:21055984, PubMed:21055985). It mediates the assembly of RAD51 filaments on single-stranded DNA (ssDNA): the MMS22L-TONSL complex is recruited to DSBs following histone replacement by histone chaperones and eviction of the replication protein A complex

Target Details

	(RPA/RP-A) from DSBs (PubMed:21055983, PubMed:21055984, PubMed:21055985, PubMed:27797818, PubMed:29478807). Following recruitment to DSBs, the TONSL-MMS22L complex promotes recruitment of RAD51 filaments and subsequent homologous recombination (PubMed:27797818, PubMed:29478807). Within the complex, TONSL acts as a histone reader, which recognizes and binds newly synthesized histones following their replacement by histone chaperones (PubMed:29478807, PubMed:27338793). Specifically binds histone H4 lacking methylation at 'Lys-20' (H4K20me0) and histone H3.1 (PubMed:27338793). {ECO:0000269|PubMed:21055983, ECO:0000269|PubMed:21055984, ECO:0000269|PubMed:21055985, ECO:0000269|PubMed:21113133, ECO:0000269|PubMed:26527279, ECO:0000269|PubMed:27338793, ECO:0000269|PubMed:27797818, ECO:0000269|PubMed:29478807, ECO:0000269|PubMed:30773278}.
Molecular Weight:	150.9 kDa
UniProt:	Q96HA7
Pathways:	Maintenance of Protein Location

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.
Expiry Date:	Unlimited (if stored properly)

Images

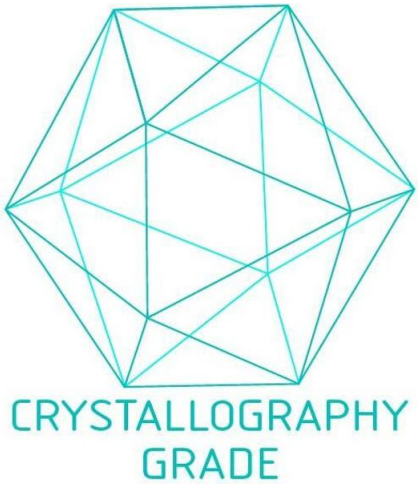

Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process