

Datasheet for ABIN3093407

KIF21B Protein (AA 1-1637) (Strep Tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	KIF21B
Protein Characteristics:	AA 1-1637
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This KIF21B protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	MAGQGDCCVK VAVRIRPQLS KEKIEGCHIC TSVTPGEPQV LLGKDKAFTY DFVFDLDTWQ EQIYSTCVSK LIEGCFEGYN ATVLAYGQTG AGKTYTMGTG FDMATSEEEQ GIIPRAIAHL FGGIAERKRR AQEQGVAGPE FKVSAQFLEL YNEEILD LFD STRDPDTRHR RSNIKIHEDA NGGIYTTGVT SRLIHSQEEL IQCLKQGALS RTTASTQMNQ QSSRSHAIPT IHLQMRMCT QPDLVNEAVT GLPDGTPPSS EYETLTAKFH FVDLAGSERL KRTGATGERA KEGISINCGL LALGNVISAL GDQSKKVVHV PYRDSKLTRL LQDSLGGNSQ TIMIACVSPS DRDFMETLNT LKYANRARNI KNKVVVNQDK TSQQISALRA EIARLQMELM EYKAGKRVIG EDGAEGYSDL FRENAMLQKE NGALRLRVKA MQEAIDAINN RVTQLMSQEA NLLAKAGDG NEAIGALIQN YIREIEELRT KLESEAMNE SLRRSLSRAS ARSPYSLGAS PAAPAFGGSP ASSMEDASEV IRRAKQDLER LKKKEVRQRR KSPEKEAFKK RAKLQQENSE ETDENEAAAA EEERDESGCE EEEGREDEDE DSGSEESLVD SDSDPPEKEV NFQADLADLT CEIEIKQKLI DELENSQRRRL QTLKHQYEEK LILLQNKIRD TQLERDRVLQ NLSTMECYTE EKANKIKADY EKRLREMNRD
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LQKLQAAQKE HARLLKNQSR YERELKKLQA EVAEMKKAKV ALMKQMREEQ QRRRLVETKR
NREIAQLKKE QRRQEFQIRA LESQKRQQEM VLRRKTQEVs ALRRLAKPMS ERVAGRAGLK
PPMLDSGAEV SASTTSSEAE SGARSVSSIV RQWNRKINHF LGDHPAPTVN GTRPARKKFQ
KKGASQSFSK AARLKWQSLE RRIIDIVMQR MTIVNLEADM ERLIKKREEL FLLQEALRRK
RERLQAESPE EEKGLQELAE EIEVLAANID YINDGITDCQ ATIVQLEETK EELDSTDTSV
VISSCSLAEA RLLLDNFLKA SIDKGLQVAQ KEAQIRLLEG RLRQTD MAGS SQNHLLLDAL
REKAEAHPEL QALIYNVQQE NGYASTDEEI SEFSEGSFSQ SFTMKGSTSH DDFKFKSEPK
LSAQMKAVSA ECLGPPLDIS TKNITKSLAS LVEIKEDGVG FSVRDPYYRD RVSRTVSLPT
RGSTFPRQSR ATETSPLTRR KSYDRGQPIR STDVGFTPPS SPPTRPRNDR NVFSRLTSNQ
SQGSALDKSD DSDSSLSEVL RGIISPVGGA KGARTAPLQC VSMAEGHTKP ILCLDATDEL
LFTGSKDRSC KMWNLV TGQE IAALKGHPNN VVSIKYCSHS GLVFSVSTSY IKVWDIRD SA
KCIRTLTSSG QVISGDACAA TSTRAITSAQ GEHQINQIAL SPSGTMLYAA SGN AVRIWEL
SRFQPVGKLT GHIGPVMCLT VTQTASQHD L VVTGSKDHYV KMFELGECVT GTIGPTHNFE
PPHYDGIECL AIQGDILFSG SRDNGIKKWD LDQQELIQQI PNAHKDWVCA LAFIPGRPML
LSACRAGVIK VWNVDNFTPI GEIKGHDSPI NAICTNAKHI FTASSDCRVK LWNYPGLTP
CLPRRVLAIK GRATTLP

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

Product Details

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®): 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:	KIF21B
Alternative Name:	KIF21B (KIF21B Products)
Background:	Kinesin-like protein KIF21B,FUNCTION: Plus-end directed microtubule-dependent motor protein which displays processive activity. Is involved in regulation of microtubule dynamics, synapse function and neuronal morphology, including dendritic tree branching and spine formation. Plays a role in learning and memory. Involved in delivery of gamma-aminobutyric acid (GABA(A)) receptor to cell surface. {ECO:0000250 UniProtKB:Q9QXL1}.

Target Details

Molecular Weight: 182.7 kDa

UniProt: [O75037](#)

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)



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