

Datasheet for ABIN3091953
AZI1 Protein (AA 1-1083) (Strep Tag)



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1 Image

Overview

Quantity:	1 mg
Target:	AZI1
Protein Characteristics:	AA 1-1083
Origin:	Human
Source:	Tobacco (<i>Nicotiana tabacum</i>)
Protein Type:	Recombinant
Purification tag / Conjugate:	This AZI1 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Sequence: MKGTRAIGSV PERSPAGVDL SLTGLPPPVS RRPGSAATTK PIVRSVSVVT GSEQKRKLVLE
ATGPGGSQAI>NNLRRSNSTT QVSQPRSGSP RPTEPTDFLM LFEGSPSGKK RPASLSTAPS
EKGATWNVLD DQPRGFTLPS NARSSSALDS PAGPRRKECT VALAPNFTAN NRSNKGAVGN
CVTTMVHNRY TPSERAPPLK SSNQTAPSLN NIIKAATCEG SESSGFGKLP KNVSSATHSA
RNNTGGSTGL PRRKEVTEEE AERFIHQVNQ ATVTIQRWYR HQVQRRGAGA ARLEHLLQAK
REEQRQRSGE GTLLDLHQQK EAARRKAREE KARQARRAAI QELQQKRALR AQKASTAERG
PPENPRETRV PGMRQPAQEL SPTPGGTAHQ ALKANNTGGG LPAAGPGDRC LPTSDSSPEP
QQPPEDRTQD VLAQDAAGDN LEMMAPSRGS AKSRGPLEEL LHTLQLEKE PDVLP RPRTH
HRGRYAWASE VTTEDDASSL TADNLEKFGK LSAFPEPPED GTLLSEAKLQ SIMSFLDEME
KSGQDQLDSQ QEGWVPEAGP GPLELGSEVS TSMRLKLEV EEKKQAMLLL QRALAQQRD
TARRVKETEK ALSRQLQRQR EHYEATIQRH LAFIDQLIED KKV LSEKCEA VVAELKQEDQ
RCTERVAQAQ AQHELEIKKL KELMSATEKA RREKWISEKT KKIKEVTVRG LEPEIQKLIA

RHKQEVRRLLK SLHEAELLQS DERASQRCLR QAEELREQL REKEALGQQE RERARQRFQQ
HLEQEQWALQ QQRQLYSEV AEERERLGQQ AARQRAELEE LRQQLSESSS ALTRALRAEF
EKGREEQERR HQMELNTLKQ QLELERQAW EAGRTRKEEAW LLNREQLRE EIRKGRDKEI
ELVIHRLEAD MALAKEESEK AAESRIKRLR DKYEAELSE EQSERKLQER CSELKGQLGE
AEGENLRLQG LVRQKERALE DAQAVNEQLS SERSNLAQVI RQEFEDRLAA SEEETRQAKA
ELATLQARQQ LELEEVRHV KTALARKEEA VSSLRTQHEA AVKRADHLEE LLEQHRRPTP STK

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.

Product Details

- 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®): <ol style="list-style-type: none">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:	AZI1
Alternative Name:	CEP131 (AZI1 Products)
Background:	Centrosomal protein of 131 kDa (5-azacytidine-induced protein 1) (Pre-acrosome localization protein 1),FUNCTION: Component of centriolar satellites contributing to the building of a complex and dynamic network required to regulate cilia/flagellum formation (PubMed:17954613, PubMed:24185901). In proliferating cells, MIB1-mediated ubiquitination induces its sequestration within centriolar satellites, precluding untimely cilia formation initiation (PubMed:24121310). In contrast, during normal and ultraviolet or heat shock cellular stress-induced ciliogenesis, its non-ubiquitinated form is rapidly displaced from centriolar satellites and recruited to centrosome/basal bodies in a microtubule- and p38 MAPK-dependent manner (PubMed:24121310, PubMed:26616734). Acts also as a negative regulator of BBSome ciliary trafficking (PubMed:24550735). Plays a role in sperm flagellar formation, may be involved in the regulation of intraflagellar transport (IFT) and/or intramanchette (IMT) trafficking, which are important for axoneme extension and/or cargo delivery to the nascent sperm tail (By similarity). Required for optimal cell proliferation and cell cycle progression, may play a role in the regulation of genome stability in non-ciliogenic cells (PubMed:22797915, PubMed:26297806). Involved in centriole duplication (By similarity). Required for CEP152, WDR62 and CEP63 centrosomal localization and promotes the centrosomal localization of

Target Details

CDK2 (PubMed:26297806). Essential for maintaining proper centriolar satellite integrity (PubMed:30804208). {ECO:0000250|UniProtKB:Q62036, ECO:0000269|PubMed:17954613, ECO:0000269|PubMed:22797915, ECO:0000269|PubMed:24121310, ECO:0000269|PubMed:24185901, ECO:0000269|PubMed:24550735, ECO:0000269|PubMed:26297806, ECO:0000269|PubMed:26616734, ECO:0000269|PubMed:30804208}.

Molecular Weight: 122.1 kDa

UniProt: [Q9UPN4](#)

Pathways: [M Phase](#)

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

Handling

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