

Datasheet for ABIN3096493  
**ZRANB3 Protein (AA 1-1079) (Strep Tag)**



[Go to Product page](#)

1 Image

Overview

Quantity:	1 mg
Target:	ZRANB3
Protein Characteristics:	AA 1-1079
Origin:	Human
Source:	Tobacco ( <i>Nicotiana tabacum</i> )
Protein Type:	Recombinant
Purification tag / Conjugate:	This ZRANB3 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Sequence: MPRVHNIKKS LTPHISCVTN ESDNLLDFLP DRLRAKLLPF QKDGIIIFALK RNGRCMVADE  
MGLGKTIQAI GITYFYKEEW PLLIVVPSSL RYPWTEEIEK WIPELSPEEI NVIQNKTDVR  
RMSTSKVTVL GYGLLTADAK TLIDALNNQN FKVVIVDESH YMKS RNATRS RILLPIVQKA  
RRAILLTGTP ALGRPEELFM QIEALFPQKF GRWTDYAKRY CNAHIRYFGK RPQWDCRGAS  
NLNELHQLLS DIMIRRLKTE VLTQLPPKVR QRIPFDLPSA AAKELNTSFE EWEKIMRTPN  
SGAMETVMGL ITRMFKQTAI AKAGAVKDYI KMMLQNDSLK FLVFAHHLSM LQACTEAVIE  
NKTRYIRIDG SVSSSERIHL VNQFQKDPDT RVALISIQAA GQGLTFTAAS HVVFAELYWD  
PGHIKQAEDR AHRIGQCSSV NIHYLIANGT LDTLMWGMLN RKAQVTGSTL NGRKEKIQAE  
EGDKEKWDFL QFAEAWTPND SSEELRKEAL FTHFEKEKQH DIRSFFVPQP KKRQLMTSCD  
ESKRFREENT VVSSDPTKTA ARDIIDYESD VEPETKRLKL AASEDHCSPS EETPSQSKQI  
RTPLVESVQE AKAQLTTPAF PVEGWQCSLC TYINNSELPY CEMCETPQGS AVMQIDSLNH  
IQDKNEKDDS QKDTSKKVQT ISDCEKQALA QSEPGQLADS KEETPKIEKE DGLTSQPGNE

QWKSSDTLPV YDTLMFCASR NTDRHIHYTK DGKQMSCNFI PLDIKLDLWE DLPASFQLKQ  
YRSLILRFVR EWSSLTAMKQ RIIRKSGQLF CSPILALEEI TKQQTQKQCT KRYITKEDVA  
VASMDKVKNV GGHVRLITKE SRPRDPFTKK LLEDGACVPF LNPYTVQADL TVKPSTSKGY  
LQAVDNEGNP LCLRCQQPTC QTKQACKANS WDSRFCSLKC QEEFWIRSNN SYLRAKVFET  
EHGVCQLCNV NAQELFLRLR DAPKSQRKNL LYATWTSKLP LEQLNEMIRN PGEHFWQVD  
HIKPVYGGGG QCSLDNLQTL CTVCHKERTA RQAKERSQVR RQSLASHGGS DITRFLVKK

**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"><li>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.</li><li>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.</li></ol>
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:	ZRANB3
Alternative Name:	ZRANB3 ( <a href="#">ZRANB3 Products</a> )
Background:	DNA annealing helicase and endonuclease ZRANB3 (Annealing helicase 2) (AH2) (Zinc finger Ran-binding domain-containing protein 3) [Includes: DNA annealing helicase ZRANB3 (EC 3.6.4.-), Endonuclease ZRANB3 (EC 3.1.-.-)],FUNCTION: DNA annealing helicase and endonuclease required to maintain genome stability at stalled or collapsed replication forks by facilitating fork restart and limiting inappropriate recombination that could occur during template switching events (PubMed:21078962, PubMed:22704558, PubMed:22705370, PubMed:22759634, PubMed:26884333). Recruited to the sites of stalled DNA replication by polyubiquitinated PCNA and acts as a structure-specific endonuclease that cleaves the replication fork D-loop intermediate, generating an accessible 3'-OH group in the template of the leading strand, which is amenable to extension by DNA polymerase (PubMed:22759634). In addition to endonuclease activity, also catalyzes the fork regression via annealing helicase activity in order to prevent disintegration of the replication fork and the formation of double-strand breaks (PubMed:22705370, PubMed:22704558). {ECO:0000269 PubMed:21078962, ECO:0000269 PubMed:22704558, ECO:0000269 PubMed:22705370, ECO:0000269 PubMed:22759634, ECO:0000269 PubMed:26884333}.

---

## Target Details

---

Molecular Weight: 123.2 kDa

UniProt: [Q5FWF4](#)

## 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