



[Go to Product page](#)

## Datasheet for ABIN3115430 ZFYVE27 Protein (AA 1-411) (Strep Tag)

### Overview

Quantity:	1 mg
Target:	ZFYVE27
Protein Characteristics:	AA 1-411
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ZFYVE27 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), ELISA, SDS-PAGE (SDS)

### Product Details

Sequence: MQTSEREGSG PELSPVMPE APLESPPFPT KSPAFDLFNL VLSYKRLEIY LEPLKDAGDG  
VRYLLRWQMP LCSLLTCLGL NVLFLTLNEG AWYSVGALMI SVPALLGYLQ EVCRARLPDS  
ELMRRKYHSV RQEDLQRGRL SRPEAVAEVK SFLIQLEAFL SRLCCTCEAA YRVLHWENPV  
VSSQFYGALL GTVCMLYLLP LCWVLTLLNS TLFLGNVEFF RVVSEYRASL QQRMNPKQEE  
HAFESPPPPD VGGKDGLMDS TPALTPTEDL TPGSVVEEAE AEPDEEFKDA IEETHLVVLE  
DDEGAPCPAE DELALQDNGF LSKNEVLRSK VSRLTERLRK RYPTNNGNC TGCSATFSVL  
KKRRSCSNCG NSFCSRCCSF KVPKSSMGAT APEAQRETVF VCASCNQTLS K

**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®):

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.

## Product Details

---

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:	ZFYVE27
Alternative Name:	ZFYVE27 ( <a href="#">ZFYVE27 Products</a> )
Background:	<p>Protrudin (Spastic paraplegia 33 protein) (Zinc finger FYVE domain-containing protein 27),FUNCTION: Key regulator of RAB11-dependent vesicular trafficking during neurite extension through polarized membrane transport (PubMed:17082457). Promotes axonal elongation and contributes to the establishment of neuronal cell polarity (By similarity). Involved in nerve growth factor-induced neurite formation in VAPA-dependent manner (PubMed:19289470). Contributes to both the formation and stabilization of the tubular ER network (PubMed:24668814). Involved in ER morphogenesis by regulating the sheet-to-tubule balance and possibly the density of tubule interconnections (PubMed:23969831). Acts as an adapter protein and facilitates the interaction of KIF5A with VAPA, VAPB, SURF4, RAB11A, RAB11B and RTN3 and the ZFYVE27-KIF5A complex contributes to the transport of these proteins in neurons. Can induce formation of neurite-like membrane protrusions in non-neuronal cells in a KIF5A/B-dependent manner (PubMed:21976701). {ECO:0000250 UniProtKB:Q3TXX3, ECO:0000269 PubMed:17082457, ECO:0000269 PubMed:19289470, ECO:0000269 PubMed:21976701, ECO:0000269 PubMed:23969831, ECO:0000269 PubMed:24668814}.</p>

Molecular Weight: 45.8 kDa

UniProt: [Q5T4F4](#)

Pathways: [Neurotrophin Signaling Pathway](#)

## 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

## Application Details

---

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)