

Datasheet for ABIN3115845

## Nesprin3 Protein (AA 1-975) (Strep Tag)



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### Overview

Quantity:	250 µg
Target:	Nesprin3 (C14orf49)
Protein Characteristics:	AA 1-975
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This Nesprin3 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

### Product Details

Brand:	AliCE®
Sequence:	<p>MTQQPQDDFD RSVEDAQAWM KAVQDQLQVN DNTQGPRAL EARLWETEKI CQLEPEGRVR</p> <p>VDLVLRMAEA LLACCPGDQK PGILARLKI KAQWEETVTY MTHCHSRIEW VWLHWSEYLL</p> <p>ARDEFYRWFQ KMMVTLEPHI ELQLGLKEKQ WQLSHAQVLL HNVDNQAVLL DRLLLEEAASL</p> <p>FNRIGDPSVD EDAQKRMKAE YDAVKAKAQK RVDLLEQVAR EHEEYQAGVD EFQLWLKAVV</p> <p>EKVNGCLGRN CKLPITQRLS TLQDIKDFP RGEESLETLE EQSAGVIRNT SPLGAEKITG</p> <p>ELEEMRKVLE KLRALWEEEE ERLRGLLSR GAWEQQIKQL EAELSEFRMV LQRLAQEGLQ</p> <p>PAAKAGTEDE LVAHWRRYSA TRALASEEP RVDRLQAQLK ELIVFPHNLK PLSDSVIATI</p> <p>QEYQSLKVKS ARLRNAAAVE LWQHFQRPLQ DLQLWKALAQ RLLEVTASLP DLPSLHTFLP</p> <p>QIEAALMESS RLKELLTMLQ LKKDLLIGIF GQERATALLE QVAGSMRDRD LLHNSLLQRK</p> <p>SKLQSLAQH KDFGAAFEPL QRKLLDLQVR VQAEKGLQRD LPGKQAQLSR LQGLQEEGLD</p> <p>LGAQMEAAP LVQENPNHQH KMDQLSSDFQ ALQRSLEDLV DRCRQSVQEH CTFSHQLEL</p>

RQWIVVTTQK LEAHRGEAGP GDAESQAEF ERLVAEFPEK EAQLSLVEAQ GWLVMEKSSP  
EGAAVVQEEL RELAESWRAL RLLEESLLSL IRNWHLQRME VDSGKKMVFT NNIPKSGFLI  
NPMDDIPRHR RRANLLQEEE GSHEDFSQLL RNFGQWLQVE NSKLVRIIAM RTSTAEDLRT  
RKSKLQLEA RVPEGQHLFE NLLRLGPARG TSDELEDLRY QWMLYKSKLK DSGHLLTQSS  
PGEPTGFQKT RRWRGLGSLF RRACCVALPL QLLLLLFLLL LFLLLPIREED RSCTLANNFA  
RSFTLMLRYN GPPPT

**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.**

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### Characteristics:

#### Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified in one-step affinity chromatography
- 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 try to ensure that you receive soluble 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 against its specific reference buffer.

## Product Details

- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification: One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®).

Purity: > 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Grade: custom-made

## Target Details

Target: Nesprin3 (C14orf49)

Alternative Name: SYNE3 ([C14orf49 Products](#))

Background: Nesprin-3 (KASH domain-containing protein 3) (KASH3) (Nuclear envelope spectrin repeat protein 3), FUNCTION: As a component of the LINC (Linker of Nucleoskeleton and Cytoskeleton) complex involved in the connection between the nuclear lamina and the cytoskeleton. The nucleocytoplasmic interactions established by the LINC complex play an important role in the transmission of mechanical forces across the nuclear envelope and in nuclear movement and positioning. Probable anchoring protein which tethers the nucleus to the cytoskeleton by binding PLEC which can associate with the intermediate filament system. Plays a role in the regulation of aortic epithelial cell morphology, and is required for flow-induced centrosome polarization and directional migration in aortic endothelial cells.  
{ECO:0000269|PubMed:16330710, ECO:0000269|PubMed:18396275, ECO:0000269|PubMed:21937718}.

Molecular Weight: 112.2 kDa

UniProt: [Q6ZMZ3](#)

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

Application Details

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Restrictions: For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol <b>Might differ depending on protein.</b>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months