



[Go to Product page](#)

Datasheet for ABIN3117737

## ESYT1 Protein (AA 1-1104) (Strep Tag)

### 1 Image

#### Overview

Quantity:	1 mg
Target:	ESYT1
Protein Characteristics:	AA 1-1104
Origin:	Human
Source:	Tobacco ( <i>Nicotiana tabacum</i> )
Protein Type:	Recombinant
Purification tag / Conjugate:	This ESYT1 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), ELISA, SDS-PAGE (SDS)

#### Product Details

Sequence: MERSPGEGPS PSPMDQPSAP SDPTDQPPAA HAKPDPGSGG QPAGPGAAGE ALAVLTSFGR  
RLLVLIPVYL AGAVGLSVGF VLFGLALYLG WRRVRDEKER SLRAARQLLD DEEQLTAKTL  
YMSHRELPAW VSFPDVEKAE WLNKIVAQVW PFLGQYMEKL LAETVAPAVR GSNPHLQTFT  
FTRVELGEKP LRIIGVKVHP GQRKEQILLD LNISYVGDVQ IDVEVKKYFC KAGVKGMQLH  
GVLRVILEPL IGDLPFVGAV SMFFIRRPTL DINWTGMTNL LDIPGLSSLS DTMIMDSIAA  
FLVLPNRLLV PLVPDLQDVA QLRSPLRGI IRIHLLAARG LSSKDKYVKG LIEGKSDPYA  
LVRLGTQTFC SRVIDEELNP QWGETYEV MV HEVPGQEIEV EVFDKDPDKD DFLGRMKLDV  
GKVLQASVLD DWFPLQGGQG QVHLRLEWLS LLSDAEKLEQ VLQWNWGVSS RPDPPSAAIL  
VYYLDRAQDL PLKKGKNEPN PMVQLSIQDV TQESKAVYST NCPVWEEAFR FFLQDPQSQE  
LDVQVKDDSR ALTLGALTLP LARLLTAPEL ILDQWFQLSS SGPNSRLYMK LVMRILYLDL  
SEICFPTVPG CPGAWDVDSE NPQRGSSVDA PPRPCHTTPD SQFGTEHVLR IHVLEAQDLI  
AKDRFLGGLV KGKSDPYVKL KLAGRSFRSH VVREDLNPRW NEVFEVIVTS VPGQELEVEV

FDKDLDKDDF LGRCKVRLTT VLNSGFLDEW LTLEDVPSGR LHLRLERLTP RPTAAELEEVLQVNSLIQTQ KSAELAAALL SIYMERAE DL PLRKGTKHLS PYATLTVGDS SHKTKTISQTSAPVWDESAS FLIRKPHTES LELQVRGEGT GVLGSLSLPL SELLVADQLC LDRWFTLSSGQGVLLRAQL GILVSQHSGV EAHSHSYSHS SSSLSEPEL SGGPPHITSS APELRQLTHVDSPLEAPAG PLGQVKLTW YYSEERKLVSVIHGCRSLRQ NGRDPPDPYV SLLLLPDKNRGTKRRTSQKK RTLSPEFNER FEWELPLDEA QRRKLDVSVK SNSSFMSRER ELLGKVQLDLAETDLSQGVA RWYDLMDNKD KGSS

**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 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:

## Product Details

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- 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.

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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

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## Target Details

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Target:	ESYT1
Alternative Name:	ESYT1 ( <a href="#">ESYT1 Products</a> )
Background:	Extended synaptotagmin-1 (E-Syt1) (Membrane-bound C2 domain-containing protein),FUNCTION: Binds glycerophospholipids in a barrel-like domain and may play a role in cellular lipid transport (By similarity). Binds calcium (via the C2 domains) and translocates to sites of contact between the endoplasmic reticulum and the cell membrane in response to increased cytosolic calcium levels. Helps tether the endoplasmic reticulum to the cell membrane and promotes the formation of appositions between the endoplasmic reticulum and the cell membrane. {ECO:0000250, ECO:0000269 PubMed:23791178, ECO:0000269 PubMed:24183667}.
Molecular Weight:	122.9 kDa
UniProt:	<a href="#">Q9BSJ8</a>

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## Application Details

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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
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## Application Details

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guarantee though.

Comment:

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Restrictions:

For Research Use only

## Handling

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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