

# Datasheet for ABIN3115238 **SV2C Protein (AA 1-727) (Strep Tag)**



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#### Overview

Quantity:	250 μg
Target:	SV2C
Protein Characteristics:	AA 1-727
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SV2C protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

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Product Details	
Brand:	AliCE®
Sequence:	MEDSYKDRTS LMKGAKDIAR EVKKQTVKKV NQAVDRAQDE YTQRSYSRFQ DEEDDDDYYP
	AGETYNGEAN DDEGSSEATE GHDEDDEIYE GEYQGIPSMN QAKDSIVSVG QPKGDEYKDR
	RELESERRAD EEELAQQYEL IIQECGHGRF QWALFFVLGM ALMADGVEVF VVGFVLPSAE
	TDLCIPNSGS GWLGSIVYLG MMVGAFFWGG LADKVGRKQS LLICMSVNGF FAFLSSFVQG
	YGFFLFCRLL SGFGIGGAIP TVFSYFAEVL AREKRGEHLS WLCMFWMIGG IYASAMAWAI
	IPHYGWSFSM GSAYQFHSWR VFVIVCALPC VSSVVALTFM PESPRFLLEV GKHDEAWMIL
	KLIHDTNMRA RGQPEKVFTV NKIKTPKQID ELIEIESDTG TWYRRCFVRI RTELYGIWLT
	FMRCFNYPVR DNTIKLTIVW FTLSFGYYGL SVWFPDVIKP LQSDEYALLT RNVERDKYAN
	FTINFTMENQ IHTGMEYDNG RFIGVKFKSV TFKDSVFKSC TFEDVTSVNT YFKNCTFIDT
	VFDNTDFEPY KFIDSEFKNC SFFHNKTGCQ ITFDDDYSAY WIYFVNFLGT LAVLPGNIVS
	ALLMDRIGRL TMLGGSMVLS GISCFFLWFG TSESMMIGML CLYNGLTISA WNSLDVVTVE

LYPTDRRATG FGFLNALCKA AAVLGNLIFG SLVSITKSIP ILLASTVLVC GGLVGLCLPD TRTQVLM

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 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 posttranslational 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.
- · 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®).

## **Product Details** > 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC). Purity: Grade: custom-made Target Details SV2C Target: SV2C (SV2C Products) Alternative Name: Background: Synaptic vesicle glycoprotein 2C,FUNCTION: Plays a role in the control of regulated secretion in neural and endocrine cells, enhancing selectively low-frequency neurotransmission. Positively regulates vesicle fusion by maintaining the readily releasable pool of secretory vesicles. {ECO:0000250|UniProtKB:Q9Z216}., FUNCTION: (Microbial infection) Receptor for C.botulinum neurotoxin type A (BoNT/A, botA), the toxin probably binds via extracellular loop 4 (PubMed:27313224). Recognition by BoNT/A relies on both protein-protein and protein-Nglycosylation, glycosylation of Asn-559 increases its affinity for BoNT/A (PubMed:27313224). Also serves as a receptor for the closely related C.botulinum neurotoxin type A2, glycosylation is not essential but enhances the interaction (PubMed:29649119). {ECO:0000269|PubMed:24240280, ECO:0000269|PubMed:27294781, ECO:0000269|PubMed:27313224, ECO:0000269|PubMed:28252640, ECO:0000269|PubMed:29649119}., FUNCTION: (Microbial infection) Possible receptor for C.botulinum neurotoxin type D (BoNT/D, botD), note that type D does not usually infect humans. {ECO:0000269|PubMed:21483489}. 82.3 kDa Molecular Weight: UniProt: Q496J9 **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

### **Application Details**

	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.
	Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol Might differ depending on protein.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months