

# Datasheet for ABIN3135661 SV2C Protein (AA 1-727) (Strep Tag)



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## Overview

Quantity:	1 mg
Target:	SV2C
Protein Characteristics:	AA 1-727
Origin:	Mouse
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SV2C protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

## **Product Details**

Sequence:

MEDSYKDRTS LMKGAKDIAK EVKKQTVKKV NQAVDRAQDE YTQRSYSRFQ DEEDDDDYYP
PGETYSGEVN DDEGSSEATE GHDEEDEIYE GEYQGIPSTN QGKDSIVSVG QPKGDEYKDR
RELESERRAD EEELAQQYEL IIQECGHGRF QWALFFVLGM ALMADGVEVF VVGFVLPSAE
TDLCIPNSGS GWLGSIVYLG MMVGAFFWGG LADKVGRKQS LLICMSVNGF FAFLSSFVQG
YGFFLVCRLL SGFGIGGAIP TVFSYFAEVL AREKRGEHLS WLCMFWMIGG IYASAMAWAI
IPHYGWSFSM GSAYQFHSWR VFVIVCALPC VSSVVALTFM PESPRFLLEV GKHDEAWMIL
KLIHDTNMRA RGQPEKVFTV NKIKTPKQID ELIEIESDTG TWYRRCFVRI RTELYGIWLT
FMRCFNYPVR ENTIKLTIVW FTLSFGYYGL SVWFPDVIKH LQSDEYALLT RNVQKDKYAN
FSINFTMENQ IHTGMEYENG RFLGVKFKSV TFKDSVFKSC TFDDVTSVNT YFKNCTFIDT
LFDNTDFEPY KFIDSEFQNC SFLHNKTGCQ ITFDDDYSAY WIYFVNFLGT LAVLPGNIVS
ALLMDRIGRL TMLGGSMVLS GISCFFLWFG TSESMMIGML CLYNGLTISA WNSLDVVTVE
LYPTDRRATG FGFLNALCKA AAVLGNLIFG SLVSITKAIP ILLASTVLVC GGLVGLRLPD TRTOVLM

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 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 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. ≥ 80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot. Purity: Endotoxin Level: Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg) Target Details SV2C Target: Sv2c (SV2C Products) Alternative Name: Background: Synaptic vesicle glycoprotein 2C (Synaptic vesicle protein 2C), FUNCTION: Plays a role in the control of regulated secretion in neural and endocrine cells, enhancing selectively lowfrequency 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 binds Sv2c via extracellular loop 4 (PubMed:16543415). {ECO:0000269|PubMed:16543415, ECO:0000269|PubMed:16545378}., FUNCTION: (Microbial infection) Possible receptor for C.botulinum neurotoxin type D (BoNT/D, botD) (PubMed:21483489). {ECO:0000269|PubMed:21483489}. Molecular Weight: 82.3 kDa UniProt: 069ZS6 **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. 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)