

# Datasheet for ABIN3095380

# SH2D3C Protein (AA 1-860) (Strep Tag)



### Overview

Quantity:	250 μg
Target:	SH2D3C
Protein Characteristics:	AA 1-860
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SH2D3C protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Brand:	AliCE®
Sequence:	MTEGTKKTSK KFKFFKFKGF GSLSNLPRSF TLRRSSASIS RQSHLEPDTF EATQDDMVTV
	PKSPPAYARS SDMYSHMGTM PRPSIKKAQN SQAARQAQEA GPKPNLVPGG VPDPPGLEAA
	KEVMVKATGP LEDTPAMEPN PSAVEVDPIR KPEVPTGDVE EERPPRDVHS ERAAGEPEAG
	SDYVKFSKEK YILDSSPEKL HKELEEELKL SSTDLRSHAW YHGRIPREVS ETLVQRNGDF
	LIRDSLTSLG DYVLTCRWRN QALHFKINKV VVKAGESYTH IQYLFEQESF DHVPALVRYH
	VGSRKAVSEQ SGAIIYCPVN RTFPLRYLEA SYGLGQGSSK PASPVSPSGP KGSHMKRRSV
	TMTDGLTADK VTRSDGCPTS TSLPRPRDSI RSCALSMDQI PDLHSPMSPI SESPSSPAYS
	TVTRVHAAPA APSATALPAS PVARRSSEPQ LCPGSAPKTH GESDKGPHTS PSHTLGKASP
	SPSLSSYSDP DSGHYCQLQP PVRGSREWAA TETSSQQARS YGERLKELSE NGAPEGDWGK
	TFTVPIVEVT SSFNPATFQS LLIPRDNRPL EVGLLRKVKE LLAEVDARTL ARHVTKVDCL
	VARILGVTKE MQTLMGVRWG MELLTLPHGR QLRLDLLERF HTMSIMLAVD ILGCTGSAEE

RAALLHKTIQ LAAELRGTMG NMFSFAAVMG ALDMAQISRL EQTWVTLRQR HTEGAILYEK KLKPFLKSLN EGKEGPPLSN TTFPHVLPLI TLLECDSAPP EGPEPWGSTE HGVEVVLAHL EAARTVAHHG GLYHTNAEVK LQGFQARPEL LEVFSTEFQM RLLWGSQGAS SSQARRYEKF DKVLTALSHK LEPAVRSSEL

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.

### **Product Details**

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:	SH2D3C
Alternative Name:	SH2D3C (SH2D3C Products)
Background:	SH2 domain-containing protein 3C (Cas/HEF1-associated signal transducer) (Chat-H) (Novel
	SH2-containing protein 3) (SH2 domain-containing Eph receptor-binding protein 1)
	(SHEP1), FUNCTION: Acts as an adapter protein that mediates cell signaling pathways involved
	in cellular functions such as cell adhesion and migration, tissue organization, and the regulation
	of the immune response (PubMed:12432078, PubMed:20881139). Plays a role in integrin-
	mediated cell adhesion through BCAR1-CRK-RAPGEF1 signaling and activation of the small
	GTPase RAP1 (PubMed:12432078). Promotes cell migration and invasion through the
	extracellular matrix (PubMed:20881139). Required for marginal zone B-cell development and
	thymus-independent type 2 immune responses (By similarity). Mediates migration and
	adhesion of B cells in the splenic marginal zone via promoting hyperphosphorylation of
	NEDD9/CASL (By similarity). Plays a role in CXCL13-induced chemotaxis of B-cells (By
	similarity). Plays a role in the migration of olfactory sensory neurons (OSNs) into the forebrain
	and the innervation of the olfactory bulb by the OSN axons during development (By similarity).
	Required for the efficient tyrosine phosphorylation of BCAR1 in OSN axons (By similarity).
	{ECO:0000250 UniProtKB:Q9QZS8, ECO:0000269 PubMed:12432078,
	ECO:0000269 PubMed:20881139}., FUNCTION: [Isoform 1]: Important regulator of chemokine-
	induced, integrin-mediated T lymphocyte adhesion and migration, acting upstream of RAP1 (By
	similarity). Required for tissue-specific adhesion of T lymphocytes to peripheral tissues (By
	similarity). Required for basal and CXCL2 stimulated serine-threonine phosphorylation of
	NEDD9 (By similarity). May be involved in the regulation of T-cell receptor-mediated IL2
	production through the activation of the JNK pathway in T-cells (By similarity).
	{ECO:0000250 UniProtKB:Q9QZS8}., FUNCTION: [Isoform 2]: May be involved in the
	BCAR1/CAS-mediated JNK activation pathway. {ECO:0000250 UniProtKB:Q9QZS8}.
Molecular Weight:	94.4 kDa

UniProt:

Q8N5H7

## **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 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 <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