

# Datasheet for ABIN3095650 ST5 Protein (AA 1-1137) (Strep Tag)



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## Overview

Quantity:	250 μg
Target:	ST5
Protein Characteristics:	AA 1-1137
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ST5 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Brand:	AliCE®
Sequence:	MTMTANKNSS ITHGAGGTKA PRGTLSRSQS VSPPPVLSPP RSPIYPLSDS ETSACRYPSH
	SSSRVLLKDR HPPAPSPQNP QDPSPDTSPP TCPFKTASFG YLDRSPSACK RDAQKESVQG
	AAQDVAGVAA CLPLAQSTPF PGPAAGPRGV LLTRTGTRAH SLGIREKISA WEGRREASPR
	MSMCGEKREG SGSEWAASEG CPSLGCPSVV PSPCSSEKTF DFKGLRRMSR TFSECSYPET
	EEEGEALPVR DSFYRLEKRL GRSEPSAFLR GHGSRKESSA VLSRIQKIEQ VLKEQPGRGL
	PQLPSSCYSV DRGKRKTGTL GSLEEPAGGA SVSAGSRAVG VAGVAGEAGP PPEREGSGST
	KPGTPGNSPS SQRLPSKSSL DPAVNPVPKP KRTFEYEADK NPKSKPSNGL PPSPTPAAPP
	PLPSTPAPPV TRRPKKDMRG HRKSQSRKSF EFEDASSLQS LYPSSPTENG TENQPKFGSK
	STLEENAYED IVGDLPKENP YEDVDLKSRR AGRKSQQLSE NSLDSLHRMW SPQDRKYNSP
	PTQLSLKPNS QSLRSGNWSE RKSHRLPRLP KRHSHDDMLL LAQLSLPSSP SSLNEDSLST
	TSELLSSRRA RRIPKLVQRI NSIYNAKRGK KRLKKLSMSS IETASLRDEN SESESDSDDR

FKAHTQRLVH IQSMLKRAPS YRTLELELLE WQERELFEYF VVVSLKKKPS RNTYLPEVSY
QFPKLDRPTK QMREAEERLK AIPQFCFPDA KDWLPVSEYS SETFSFMLTG EDGSRRFGYC
RRLLPSGKGP RLPEVYCVIS RLGCFGLFSK VLDEVERRRG ISAALVYPFM RSLMESPFPA
PGKTIKVKTF LPGAGNEVLE LRRPMDSRLE HVDFECLFTC LSVRQLIRIF ASLLLERRVI
FVADKLSTLS SCSHAVVALL YPFSWQHTFI PVLPASMIDI VCCPTPFLVG LLSSSLPKLK
ELPVEEALMV NLGSDRFIRQ MDDEDTLLPR KLQAALEQAL ERKNELISQD SDSDSDDECN
TLNGLVSEVF IRFFVETVGH YSLFLTQSEK GERAFQREAF RKSVASKSIR RFLEVFMESQ
MFAGFIODRE LRKCRAKGLF EORVEOYLEE LPDTEOSGMN KFLRGLGNKM KFLHKKN

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®). > 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC). Purity: Grade: custom-made Target Details ST5 Target: Alternative Name: DENND2B (ST5 Products) Background: DENN domain-containing protein 2B (HeLa tumor suppression 1) (Suppression of tumorigenicity 5 protein), FUNCTION: [Isoform 1]: May be involved in cytoskeletal organization and tumorogenicity. Seems to be involved in a signaling transduction pathway leading to activation of MAPK1/ERK2. Plays a role in EGFR trafficking from recycling endosomes back to the cell membrane (PubMed:29030480). {ECO:0000269|PubMed:29030480, ECO:0000269|PubMed:9632734}., FUNCTION: [Isoform 2]: Guanine nucleotide exchange factor (GEF) which may activate RAB9A and RAB9B. Promotes the exchange of GDP to GTP, converting inactive GDP-bound Rab proteins into their active GTP-bound form. {ECO:0000269|PubMed:20937701}., FUNCTION: [Isoform 3]: May block ERK2 activation stimulated by ABL1 (Probable). May alter cell morphology and cell growth (Probable). {ECO:0000305|PubMed:10229203, ECO:0000305|PubMed:9632734}. Molecular Weight: 126.5 kDa UniProt: P78524 **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**

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