

# Datasheet for ABIN3095413 SIK2 Protein (AA 1-926) (Strep Tag)



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Quantity:	250 μg
Target:	SIK2
Protein Characteristics:	AA 1-926
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SIK2 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details		
Brand:	AliCE®	
Sequence:	MVMADGPRHL QRGPVRVGFY DIEGTLGKGN FAVVKLGRHR ITKTEVAIKI IDKSQLDAVN	
	LEKIYREVQI MKMLDHPHII KLYQVMETKS MLYLVTEYAK NGEIFDYLAN HGRLNESEAR	
	RKFWQILSAV DYCHGRKIVH RDLKAENLLL DNNMNIKIAD FGFGNFFKSG ELLATWCGSP	
	PYAAPEVFEG QQYEGPQLDI WSMGVVLYVL VCGALPFDGP TLPILRQRVL EGRFRIPYFM	
	SEDCEHLIRR MLVLDPSKRL TIAQIKEHKW MLIEVPVQRP VLYPQEQENE PSIGEFNEQV	
	LRLMHSLGID QQKTIESLQN KSYNHFAAIY FLLVERLKSH RSSFPVEQRL DGRQRRPSTI	
	AEQTVAKAQT VGLPVTMHSP NMRLLRSALL PQASNVEAFS FPASGCQAEA AFMEEECVDT	
	PKVNGCLLDP VPPVLVRKGC QSLPSNMMET SIDEGLETEG EAEEDPAHAF EAFQSTRSGQ	
	RRHTLSEVTN QLVVMPGAGK IFSMNDSPSL DSVDSEYDMG SVQRDLNFLE DNPSLKDIML	
	ANQPSPRMTS PFISLRPTNP AMQALSSQKR EVHNRSPVSF REGRRASDTS LTQGIVAFRQ	
	HLQNLARTKG ILELNKVQLL YEQIGPEADP NLAPAAPQLQ DLASSCPQEE VSQQQESVST	

LPASVHPQLS PRQSLETQYL QHRLQKPSLL SKAQNTCQLY CKEPPRSLEQ QLQEHRLQQK RLFLQKQSQL QAYFNQMQIA ESSYPQPSQQ LPLPRQETPP PSQQAPPFSL TQPLSPVLEP SSEQMQYSPF LSQYQEMQLQ PLPSTSGPRA APPLPTQLQQ QQPPPPPPPP PPRQPGAAPA PLQFSYQTCE LPSAASPAPD YPTPCQYPVD GAQQSDLTGP DCPRSPGLQE APSSYDPLAL SELPGLFDCE MLDAVDPQHN GYVLVN

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.

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).
custom-made
SIK2
SIK2 (SIK2 Products)
Serine/threonine-protein kinase SIK2 (EC 2.7.11.1) (Qin-induced kinase) (Salt-inducible kinase 2) (SIK-2) (Serine/threonine-protein kinase SNF1-like kinase 2), FUNCTION: Serine/threonine-protein kinase that plays a role in many biological processes such as fatty acid oxidation, autophagy, immune response or glucose metabolism (PubMed:23322770, PubMed:26983400). Phosphorylates 'Ser-794' of IRS1 in insulin-stimulated adipocytes, potentially modulating the efficiency of insulin signal transduction. Inhibits CREB activity by phosphorylating and repressing TORCs, the CREB-specific coactivators (PubMed:15454081). Phosphorylates EP300 and thus inhibits its histone acetyltransferase activity (PubMed:21084751, PubMed:26983400). In turn, regulates the DNA-binding ability of several transcription factors such as PPARA or MLXIPL (PubMed:21084751, PubMed:26983400). Also plays a role in thymic T-cell development (By similarity). {ECO:0000250 UniProtKB:Q8CFH6, ECO:0000269 PubMed:23322770, ECO:0000269 PubMed:21084751, ECO:0000269 PubMed:23322770, ECO:0000269 PubMed:26983400).
103.9 kDa
Q9H0K1
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.
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

## **Application Details**

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