

Datasheet for ABIN3132005

## 14-3-3 sigma/SFN Protein (AA 1-248) (Strep Tag)



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### Overview

Quantity:	1 mg
Target:	14-3-3 sigma/SFN (SFN)
Protein Characteristics:	AA 1-248
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This 14-3-3 sigma/SFN protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA

### Product Details

Brand:	AliCE®
Sequence:	<p>MERASLIQKA KLAEQAERYE DMAAFMKSAV EKGEELSCEE RNLLSVAYKN VVGGQRAAWR            VLSSIEQKSN EEGSEEKGPE VKEYREKVET ELRGVCDTVL GLLDSHLIKG AGDAESRVFY            LKMKGDYYRY LAEVATGDDK KRIIDSARSA YQEAMDISKK EMPPTNPIRL GLALNFSVFH            YEIANSPEEA ISLAKTTFDE AMADLHTLSE DSYKDSTLIM QLLRDNLTLW TADSAGEEGG            EAPEEPQS</p> <p><b>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.</b></p>

Characteristics:	<p>Key Benefits:</p> <ul style="list-style-type: none"> <li>Made in Germany - from design to production - by highly experienced protein experts.</li> </ul>
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## Product Details

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- 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 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!

### 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®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

## Target Details

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Target:	14-3-3 sigma/SFN (SFN)
Alternative Name:	Sfn ( <a href="#">SFN Products</a> )

## Target Details

Background:	14-3-3 protein sigma (Stratifin),FUNCTION: Adapter protein implicated in the regulation of a large spectrum of both general and specialized signaling pathways (By similarity). Binds to a large number of partners, usually by recognition of a phosphoserine or phosphothreonine motif (By similarity). Binding generally results in the modulation of the activity of the binding partner (By similarity). Promotes cytosolic retention of GBP1 GTPase by binding to phosphorylated GBP1, thereby inhibiting the innate immune response (By similarity). Also acts as a TP53/p53-regulated inhibitor of G2/M progression (By similarity). When bound to KRT17, regulates protein synthesis and epithelial cell growth by stimulating Akt/mTOR pathway (PubMed:16710422). May also regulate MDM2 autoubiquitination and degradation and thereby activate p53/TP53 (By similarity). {ECO:0000250 UniProtKB:P31947, ECO:0000269 PubMed:16710422}.
Molecular Weight:	27.7 kDa
UniProt:	<a href="#">O70456</a>
Pathways:	<a href="#">p53 Signaling, Myometrial Relaxation and Contraction</a>

## 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:	<p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> 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.</p> <p>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!</p>
Restrictions:	For Research Use only

## Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.

## Handling

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Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**

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Handling Advice: Avoid repeated freeze-thaw cycles.

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Storage: -80 °C

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Storage Comment: Store at -80°C.

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Expiry Date: 12 months