

# Datasheet for ABIN3128029

# HSPA14 Protein (AA 1-509) (Strep Tag)



## Overview

Quantity:	250 μg
Target:	HSPA14
Protein Characteristics:	AA 1-509
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This HSPA14 protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA

Brand:	AliCE®
Sequence:	MAAIGVHLGC TSACVAVYKD GRADVVANDA GDRVTPAIVA YSEREQVVGL AAKQSRIRHV
	SSTVVKVKQI LGRSSADPQA QKYISESKCL VIEKNGKLRY EIDTGEETKL VNPEDVARLI
	FSKMKETAHS VLGSDANDVV VTVPFDFGEK QKSALGEAAG AAGFNVLRLI HEPSAALLAY
	GIGQDHPTGK SNVLVFKLGG TSLSLSVMEV NSGMYRVLST NTSDNIGGAH FTDTLAQYLA
	SEFQRLFKHD VRGNARAMMK LMNSAEVAKH SLSTLGSANC FVDSLYEGQD FDCNVSRARF
	ELLCSPLFNK CTEAIRELLR QTGFTADDIN KVVLCGGSSR IPKLQQLIKD LFPAVDLLNS
	IPPDEVIPIG AAIEAGILVG KESTSGDDSV MIECSAKDIL VKGVDESGAD RFTVLFPSGT
	PLPARRQHTL QAPGRVSSVC LELYESEGKN SAKEEAKFAQ VVLQDLDKKE NGLRDILAVL
	TMKRDGSLQV TCTDQDTGKC EAITVEVAS
	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®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

# Target Details

Target Details		
Target:	HSPA14	
Alternative Name:	Hspa14 (HSPA14 Products)	
Background:	Heat shock 70 kDa protein 14 (NST-1) (hsr.1),FUNCTION: Component of the ribosome-associated complex (RAC), a complex involved in folding or maintaining nascent polypeptides in a folding-competent state. In the RAC complex, binds to the nascent polypeptide chain, while DNAJC2 stimulates its ATPase activity (By similarity). {ECO:0000250}.	
Molecular Weight:	54.7 kDa	
UniProt:	Q99M31	
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	

# Handling

Storage Comment:	Store at -80°C.
Expiry Date:	12 months