

### Datasheet for ABIN3101953

# CERS6 Protein (AA 1-384) (Strep Tag)



#### Overview

Quantity:	250 μg
Target:	CERS6
Protein Characteristics:	AA 1-384
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This CERS6 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details	
Brand:	AliCE®
Sequence:	MAGILAWFWN ERFWLPHNVT WADLKNTEEA TFPQAEDLYL AFPLAFCIFM VRLIFERFVA
	KPCAIALNIQ ANGPQIAPPN AILEKVFTAI TKHPDEKRLE GLSKQLDWDV RSIQRWFRQR
	RNQEKPSTLT RFCESMWRFS FYLYVFTYGV RFLKKTPWLW NTRHCWYNYP YQPLTTDLHY
	YYILELSFYW SLMFSQFTDI KRKDFGIMFL HHLVSIFLIT FSYVNNMARV GTLVLCLHDS
	ADALLEAAKM ANYAKFQKMC DLLFVMFAVV FITTRLGIFP LWVLNTTLFE SWEIVGPYPS
	WWVFNLLLLL VQGLNCFWSY LIVKIACKAV SRGKVSKDDR SDIESSSDEE DSEPPGKNPH
	TATTTNGTSG TNGYLLTGSC SMDD
	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:	CERS6

## **Target Details**

Alternative Name:	CERS6 (CERS6 Products)
Background:	Ceramide synthase 6 (CerS6) (LAG1 longevity assurance homolog 6) (Sphingoid base N-
	palmitoyltransferase CERS6) (EC 2.3.1.291),FUNCTION: Ceramide synthase that catalyzes the
	transfer of the acyl chain from acyl-CoA to a sphingoid base, with high selectivity toward
	palmitoyl-CoA (hexadecanoyl-CoA, C16:0-CoA) (PubMed:17977534, PubMed:17609214,
	PubMed:23530041, PubMed:26887952, PubMed:31916624). Can use other acyl donors, but
	with less efficiency (By similarity). N-acylates sphinganine and sphingosine bases to form
	dihydroceramides and ceramides in de novo synthesis and salvage pathways, respectively
	(PubMed:17977534, PubMed:23530041, PubMed:26887952, PubMed:31916624). Ceramides
	generated by CERS6 play a role in inflammatory response (By similarity). Acts as a regulator o
	metabolism and hepatic lipid accumulation (By similarity). Under high fat diet, palmitoyl- (C16:
	) ceramides generated by CERS6 specifically bind the mitochondrial fission factor MFF, thereb
	promoting mitochondrial fragmentation and contributing to the development of obesity (By
	similarity). {EC0:0000250 UniProtKB:Q8C172, EC0:0000269 PubMed:17609214,
	ECO:0000269 PubMed:17977534, ECO:0000269 PubMed:23530041,
	ECO:0000269 PubMed:26887952, ECO:0000269 PubMed:31916624}.
Molecular Weight:	44.9 kDa
UniProt:	Q6ZMG9
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