

## Datasheet for ABIN3136258

# CLASP2 Protein (AA 1-1286) (Strep Tag)



## Overview

Quantity:	250 μg
Target:	CLASP2
Protein Characteristics:	AA 1-1286
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This CLASP2 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details	
Brand:	AliCE®
Sequence:	MRRLICKRIC DYKSFDDEES VDGNRPSSAA SAFKVPAPKT PGNPVSSARK PGSAGGPKVG
	GPSKEGGAGA VDEDDFIKAF TDVPSVQIYS SRELEETLNK IREILSDDKH DWDQRANALK
	KIRSLLVAGA AQYDCFFQHL RLLDGALKLS AKDLRSQVVR EACITVAHLS TVLGNKFDHG
	AEAIVPTLFN LVPNSAKVMA TSGCAAIRFI IRHTHVPRLI PLITSNCTSK SVPVRRRSFE
	FLDLLLQEWQ THSLERHAAV LVETIKKGIH DADAEARVEA RKTYMGLRNH FPGEAETLYN
	SLEPSYQKSL QTYLKSSGSV ASLPQSDRSS SSSQESLNRP FSSKWSTANP STVAGRVSVG
	GSKANPLPGS LQRSRSDIDV NAAAGAKAHH AAGQAVRSGR LGAGALNPGS YASLEDTSDK
	MDGTASDDGR VRAKLSTPLV AVGNAKTDSR GRSRTKMVSQ SQPGSRSGSP GRVLTTTALS
	TVSSGAQRVL VNSASAQKRS KIPRSQGCSR EASPSRLSVA RSSRIPRPSV SQGCSREASR
	ESSRDTSPVR SFQPLGPGYG ISQSSRLSSS VSAMRVLNTG SDVEEAVADA LLLGDIRTKK
	KPARRRYESY GMHSDDDANS DASSACSERS YSSRNGSIPT YMRQTEDVAE VLNRCASSNW

SERKEGLLGL QNLLKNQRTL SRIELKRLCE IFTRMFADPH GKVFSMFLET LVDFIQVHKD
DLQDWLFVLL TQLLKKMGAD LLGSVQAKVQ KALDITRESF PNDLQFNILM RFTVDQTQTP
SLKVKVAILK YIETLAKQMD PRDFTNSSET RLAVSRVITW TTEPKSSDVR KAAQSVLISL
FELNTPEFTM LLGALPKTFQ DGATKLLHNH LRNTGNGTQS SMGSPLTRPT PRSPANWSSP
LTSPTNTSQN TLSPSAFDYD TENMNSEDIY SSLRGVTEAI QNFSFRSQED MSEPVRRDPK
KEDGDTICSG PGMSDPRAGG DAADGSQPAL DNKASLLHSM PLHSSPRSRD YNPYNYSDSI
SPFNKSALKE AMFDDDADQF PDDLSLDHSD LVAELLKELS NHNERIEERK IALYELMKLT
QEESFSVWDE HFKTILLLLL ETLGDKEPTI RALALKVLKE ILRHQPARFK NYAELTVMKT
LEAHKDPHKE VVRSAEEAAS VLATSISPEQ CIKVLCPIIQ TADYPINLAA IKMQTKVIER
VSKETLNMLL PEIMPGLIQG YDNSESSVRK ACVFCLVAVH AVIGDELKPH LSQLTGSKMK
LLNLYIKRAQ TGSAGADPTA DVSGQS

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:	CLASP2
Alternative Name:	Clasp2 (CLASP2 Products)
Background:	CLIP-associating protein 2 (Cytoplasmic linker-associated protein 2),FUNCTION: Microtubule
	plus-end tracking protein that promotes the stabilization of dynamic microtubules. Involved in
	the nucleation of noncentrosomal microtubules originating from the trans-Golgi network (TGN).
	Required for the polarization of the cytoplasmic microtubule arrays in migrating cells towards
	the leading edge of the cell. May act at the cell cortex to enhance the frequency of rescue of
	depolymerizing microtubules by attaching their plus-ends to cortical platforms composed of
	ERC1 and PHLDB2. This cortical microtubule stabilizing activity is regulated at least in part by
	phosphatidylinositol 3-kinase signaling. Also performs a similar stabilizing function at the
	kinetochore which is essential for the bipolar alignment of chromosomes on the mitotic
	spindle. Acts as a mediator of ERBB2-dependent stabilization of microtubules at the cell cortex.
	{ECO:0000250 UniProtKB:075122, ECO:0000269 PubMed:16914514}.
Molecular Weight:	140.7 kDa
UniProt:	Q8BRT1
Pathways:	Microtubule Dynamics, Maintenance of Protein Location

## **Application Details**

Application Notes: In addition to the applications listed above we expect the protein to work for functional studies

## **Application Details**

	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 Might differ depending on protein.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months