

Datasheet for ABIN3091963  
**CASK Protein (AA 1-926) (Strep Tag)**[Go to Product page](#)

## 1 Image

## Overview

Quantity:	1 mg
Target:	CASK
Protein Characteristics:	AA 1-926
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This CASK protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

## Product Details

Sequence:	MADDDVLFED VYELCEVIGK GPFSVVRRCI NRETGQQFAV KIVDVAKFTS SPGLSTEDLK REASICHMLK HPHIVELLET YSSDGMLYMV FEFMDGADLC FEIVKRADAG FVYSEAVASH YMRQILEALR YCHDNNIIHR DVKPHCVLLA SKENSAPVKL GGFGVAIQLG ESGLVAGGRV GTPHFMAPEV VKREPYGKPV DVWGCGVILF ILLSGCLPFY GTKERLFEGI IKGKYKMNPR QWSHISESAK DLVRRMLMLD PAERITVYEA LNHPWLKERD RYAYKIHLP E TVEQLRKFN A RRKLKGAVLA AVSSHKFNSF YGDPPEELPD FSEDPTSSGL LAAERAVSQV LDSLEEIH A L TDCSEKDLDF LHSVFDQDHL HTLLDLYDKI NTKSSPQIRN PPSDAVQRAK EVLEEISCYP ENNDAKELKR ILTQPHFMAL LQTHDVVAHE VYSDEALRVT PPPTSPYLNG DSPESANGDM DMENVTRVRL VQFQKNTDEP MGITLKMNEL NHCIVARIMH GGMIHRQGT L HVGDEIREIN GISVANQTVE QLQKMLREMR GSITFKIVPS YRTQSSSCER DSPSTSRQSP ANGHSSTNNS VSDLPSTTQP KGRQIYVRAQ FEYDPAKDDL IPCKEAGIRF RVGDIIQIIS KDDHNWWQ GK LENSKNGTAG LIPSPQLQEW RVACIAMEKT KQEQQASCTW FGK KKKKQYKD KYLAKHNAVF
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DQLDLVTYEE VVKLPAFKRK TLVLLGAHGV GRRHIKNTLI TKHPDRFAYP IPHTTRPPKK  
DEENGKNYYF VSHDQMMQDI SNNEYLEYGS HEDAMYGTKL ETIRKIHEQG LIAILDVEPQ  
ALKVLRТАEF APFVVFIAP TITPGLNEDE SLQRLQKESD ILQRTYAHYF DLTIIINNEID  
ETIRHLEEAV ELVCTAPQWV PVSQVY

**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 by multi-step, protein-specific process to ensure correct folding and modification.
- 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 will ensure that you receive a correctly folded 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 in several dilutions and is measured against its specific reference buffer.

## Product Details

- We use the ExPASy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®):  1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. Eluate fractions are analyzed by SDS-PAGE. 2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)
Grade:	Crystallography grade

## Target Details

Target:	CASK
Alternative Name:	CASK ( <a href="#">CASK Products</a> )
Background:	Peripheral plasma membrane protein CASK (hCASK) (EC 2.7.11.1) (Calcium/calmodulin-dependent serine protein kinase) (Protein lin-2 homolog),FUNCTION: Multidomain scaffolding Mg(2+)-independent protein kinase that catalyzes the phosphotransfer from ATP to proteins such as NRXN1, and plays a role in synaptic transmembrane protein anchoring and ion channel trafficking (PubMed:18423203). Contributes to neural development and regulation of gene expression via interaction with the transcription factor TBR1. Binds to cell-surface proteins, including amyloid precursor protein, neuexins and syndecans. May mediate a link between the extracellular matrix and the actin cytoskeleton via its interaction with syndecan and with the actin/spectrin-binding protein 4.1. Component of the LIN-10-LIN-2-LIN-7 complex, which associates with the motor protein KIF17 to transport vesicles containing N-methyl-D-aspartate (NMDA) receptor subunit NR2B along microtubules (By similarity). {ECO:0000250 UniProtKB:O70589, ECO:0000269 PubMed:18423203}.
Molecular Weight:	105.1 kDa
UniProt:	<a href="#">O14936</a>
Pathways:	<a href="#">Synaptic Vesicle Exocytosis</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.
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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>
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Restrictions:	For Research Use only
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## Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. If you have a special request, please contact us.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)



**Image 1.** „Crystallography Grade“ protein due to multi-step, protein-specific purification process