

Datasheet for ABIN3090907

## CEP164 Protein (AA 1-1460) (Strep Tag)



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### Overview

Quantity:	250 µg
Target:	CEP164
Protein Characteristics:	AA 1-1460
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This CEP164 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

### Product Details

Brand:	AliCE®
Sequence:	<p>MAGRPLRIGD QLVLEEDYDE TYIPSEQEIL EFAREIGIDP IKEPELMWLA REGIVAPLPG</p> <p>EWKPCQDITG DIYYFNFANG QSMWDHPCDE HYRSLVIQER AKLSTSGAIK KKKKKKEKKD</p> <p>KKDRDPPKSS LALGSSLAPV HVPLGGLAPL RGLVDTPPSA LRGSQSVSLG SSVESGRQLG</p> <p>ELMLPSQGLK TSAYTKLLG SIYEDKTALS LLGLGEETNE EDEEESDNQS VHSSEPLRN</p> <p>LHLDIGALGG DFEYEESLRT SQPEEKDVS LDSAAGPPT PCKPSSPGAD SSLSSAVGKG</p> <p>RQGSGARPGL PEKEENEKSE PKICRNLVTP KADPTGSEPA KASEKEAPED TVDAGEEGSR</p> <p>REEAAKEPKK KASALEEGSS DASQELEISE HMKEPQLSDS IASDPKSFHG LDFGFRSRIS</p> <p>EHLDVDVLS PVLGGACRQA QQPLGIEDKD DSQSSQDELQ SKQSKGLEER LSPPLPHEER</p> <p>AQSPPRSLAT EEEPPQGPEG QPEWKEAEEL GEDSAASLSL QLSLQREQAP SPPAACEKGK</p> <p>EQHSQAEELG PGQEEAEDPE EKVAVSPTTP VSPEVRSTEP VAPPEQLSEA ALKAMEEAVA</p> <p>QVLEQDQRHL LESKQEKMQQ LREKLCQEEE EEILRLHQQK EQSLSSLRER LQKAIEEEEA</p>

RMREEESQRL SWLRAQVQSS TQADEDQIRA EQEASLQKLR EELESQQKAE RASLEQKNRQ  
MLEQLKEEIE ASEKSEQAAL NAAKEKALQQ LREQLEGERK EAVATLEKEH SAELERLCSS  
LEAKHREVVS SLQKKIQEAQ QKEEAQLQKC LGQVEHRVHQ KSYHVAGYEH ELSSLLREKR  
QEVEGEHERR LDKMKEEHQQ VMAKAREQYE AEERKQRAEL LGHLTGELER LQRAHERELE  
TVRQEQHKRL EDLRRRHREQ ERKLQDLELD LETRAKDVKA RLALLEVQEE TARREKQQLL  
DVQRQVALKS EEATATHQQL EEAQKEHTHL LQSNQQLREI LDELQARKLK LESQVDLLQA  
QSQQLQKHFS SLEAEAQKKQ HLLREVTVEE NNASPHFEPD LHIEDLRKSL GTNQTKEVSS  
SLSQSKEDLY LDSLSSHNVW HLLSAEGVAL RSAKEFLVQQ TRSMRRRQTA LKAAQQHWRH  
ELASAEVAK DPPGIKALD MRKNLEKETR HLDKMSAMR KGHNLLKKKE EKLNLQLESSL  
WEEASDEGTL GGSPTKKAVT FDLSDMDSLS SESSESFSP HREWWRRQRI DSTPSLTSRK  
IHGLSHSLRQ ISSQLSSVLS ILDSLNPQSP PLLASMPAQ LPPRDPKSTP TPTYYGSLAR  
FSALSSATPT STQWAWDSGQ GPRLPSSVAQ TVDDFLLEKW RKYFPGIPL LSNSTPLES  
RLGYMSASEQ LRLQLHSHSQ VPEAGSTTFQ GIIEANRRWL ERVKNDPRLP LFSSTPKPKA  
TSLLLQLGLD EHNVRKVYRF

**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.**

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### 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 post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for

## Product Details

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:	CEP164
Alternative Name:	CEP164 ( <a href="#">CEP164 Products</a> )
Background:	Centrosomal protein of 164 kDa (Cep164),FUNCTION: Plays a role in microtubule organization and/or maintenance for the formation of primary cilia (PC), a microtubule-based structure that protrudes from the surface of epithelial cells. Plays a critical role in G2/M checkpoint and nuclear divisions. A key player in the DNA damage-activated ATR/ATM signaling cascade since it is required for the proper phosphorylation of H2AX, RPA, CHEK2 and CHEK1. Plays a critical role in chromosome segregation, acting as a mediator required for the maintenance of genomic stability through modulation of MDC1, RPA and CHEK1. {ECO:0000269 PubMed:17954613, ECO:0000269 PubMed:18283122, ECO:0000269 PubMed:23348840}.
Molecular Weight:	164.3 kDa
UniProt:	<a href="#">Q9UPV0</a>
Pathways:	<a href="#">M Phase</a>

## Application Details

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

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as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

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### 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!

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### Restrictions:

For Research Use only

## Handling

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### Format:

Liquid

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### 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.**

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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