

Datasheet for ABIN3135183

## CEP164 Protein (AA 1-1446) (His tag)



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### 1 Image

#### Overview

Quantity:	1 mg
Target:	CEP164
Protein Characteristics:	AA 1-1446
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CEP164 protein is labelled with His tag.
Application:	Crystallization (Crys), ELISA, SDS-PAGE (SDS), Western Blotting (WB)

#### Product Details

Sequence: MARRPILLGD QLVLEEDSDE TYVPSEQEIL DFARVIGIDP IKEPELMWLA REGIEAPLPK  
 GWKPCQNITG DLYYFNFDTG QSIWDHPCDE HYRKLVIQER ERWSAPGAIK KKDKKKKKEK  
 KNKKDKETSK SPLVLGSPLA LVQAPLWGLA PLRGLGDAPP SALRGSQSVS LGSSADSGHL  
 GEPTLPPQGL KAAACAKGLL ASVHEGKNAL SLLTLGEETN EEDEEESDNQ SVRSSSELLK  
 NLHLDL GALG GNFEYEESPR TSQPDKKDVS LSDADRPT PGKLFSGAD SSVASANGSK  
 SQGRGASPWN PQKENENSDP KASSSQMAPE LDPGGDQPSR ASKKQQAEDP VQAGKEGECR  
 RESAAKEPKE ASALENTSDV SEESEIHGHL K DARHSGSEA SGPKSFLGLD LGFRSRISEH  
 LLDGDTLSPV LGGGHWEAQG LDQEEQDDSK SSIAEPQSKH TQGSEREHLQ SSLHSQATEE  
 GPLQTLEGQP EWKEAEGPGK DSVASPAPLS LLQREQVLSP PASPERAEEK HSQAEELGLE  
 QPEAEETEEK VAVCPSSPVS PEVQTAEPAA PQLFSEAIL KGMELEEDQR LLEFQKEKP  
 QQLEERLWEE EEEVCQLYQ QKEKSLSLK AQLQKATAEE KEKEETKIR EESRRLVCL  
 RAQVQRTEA FENQIRTEQQ AALQRLREEA ETLQKAERAS LEQKSRRALE QLREQLEAEE

RSAQAALRAE KEAEKEAALL QLREQLEGER KEAVAGLEKK HSAELEQLCS SLEAKHQEVI  
SSLQKKIEGA QKKEAQLQE SLGWAEQRAH QKVHQVTEYE QELSSLLRDK RQEVEREHER  
KMDKMKEEHW QEMADARERY EAEERKQRAD LLGHLTGELE RLRRRAHEREL ESMRQEQQDQ  
LEDLRRRHRD HERKLQDLEV ELSSRTKDVK ARLAQLNVQE ENIRKEKQLL LDAQRQAALE  
REEATATHQH LEEAKKEHTH LLETQQLRR TIDDLRVRV ELESQVDLLQ AQSURLQKHL  
SSLEAEVQRK QDVLKEMAAE MNASPHPEPG LHIEDLRKSL DTNKNQEVSS SLSLSKEEID  
LSMESVRQFL SAEGVAVRNA KEFLVRQTRS MRRRQTALKA AQQHWRELA SAQEVDEDLP  
GTEVLGNMRK NLNEETRHL D EMKSAMRKGH DLLKKKEEKL IQLESSLQEE VSDEDTLKGS  
SIKKVTFDLS DMDDLSSSESL ESSPVLHITP TPTSADPNKI HYLSSSLQRI SSELNGVLNV  
LGSLNSQPPP QGLGSQPPPP LFTSSLRSSK NVLDPAYSSQ AKLSSLSSIT PMSTQAWWDP  
GQGTKLTSSS SSQTVDDFLL EKWRKYFPSG IPLLGSPPP PENKLGYSV SEQLHFLQRS  
HPRVPRTDGV SIQSLIDSNR KWLEHFRNDP KVQLFSSAPK ATTSNLSNL LQLGLDENNR  
LNVFHY

**Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.**

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### Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Mouse Cep164 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- 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.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

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.

The concentration of the protein is calculated using its specific absorption coefficient. We use

## Product Details

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the Expiry's protoparam tool to determine the absorption coefficient of each protein.

Purification:	Two step purification of proteins expressed in baculovirus infected SF9 insect cells: <ol style="list-style-type: none"><li>1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.</li><li>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.</li></ol>
Purity:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered
Endotoxin Level:	Protein is endotoxin free.
Grade:	Crystallography grade

## Target Details

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Target:	CEP164
Alternative Name:	Cep164 ( <a href="#">CEP164 Products</a> )
Background:	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 (By similarity). {ECO:0000250, ECO:0000269 PubMed:22863007}.
Molecular Weight:	163.6 kDa Including tag.
UniProt:	<a href="#">Q5DU05</a>
Pathways:	<a href="#">M Phase</a>

## Application Details

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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:	Protein has not been tested for activity yet. In cases in which it is highly likely that the

## Application Details

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recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.

Restrictions: For Research Use only

## Handling

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Format: Liquid

Buffer: 100 mM NaCl, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: Unlimited (if stored properly)

## Images

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