# abcam

### Product datasheet

## Recombinant Human CENPE protein ab158097

#### 1 图像

描述

产品名称
重组人CENPE蛋白

表达系统 Wheat germ Accession Q02224

**蛋白长度** Protein fragment

无动物成分 No

性质 Recombinant

**种属** Human

序列 TPVSFDETLTALQFASTAKYMKNTPYVNEVSTDEALLKRYRK

 ${\sf EIMDLKKQ}$ 

 ${\tt LEEVSLETRAQAMEKDQLAQLLEEKDLLQKVQNEKIENLTRM}$ 

LVTSSSLT LQQELKAKRKR

**氨基酸** 309 to 419

标签 GST tag N-Terminus

技术指标

Our Abpromise guarantee covers the use of ab158097 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应用 Western blot

**ELISA** 

形式 Liquid

补充说明

制备和贮存

稳定性和存储 Shipped on dry ice. Upon delivery aliquot and store at -80℃. Avoid freeze / thaw cycles.

pH: 8.00

Constituents: 0.31% Glutathione, 0.79% Tris HCI

1

#### 功能

Essential for the maintenance of chromosomal stability through efficient stabilization of microtubule capture at kinetochores. Plays a key role in the movement of chromosomes toward the metaphase plate during mitosis. Is a slow plus end-directed motor whose activity is essential for metaphase chromosome alignment. Couples chromosome position to microtubule depolymerizing activity. The highly processive microtubule-dependent motor activity of CENPE serves to power chromosome congression and provides a flexible, motile tether linking kinetochores to dynamic spindle microtubules. Necessary for the mitotic checkpoint signal at individual kinetochores to prevent aneuploidy due to single chromosome loss. Required for the efficient recruitment of BUBR1, MAD1 and MAD2 to attached and newly unattached kinetochores. Stimulates mammalian BUBR1 kinase activity. Accumulates just before mitosis at the G2 phase of the cell cycle.

疾病相关

Microcephaly 13, primary, autosomal recessive

序列相似性

Belongs to the TRAFAC class myosin-kinesin ATPase superfamily. Kinesin family.

Contains 1 kinesin motor domain.

结构域

The protein is composed of a N-terminal kinesin-motor domain involved in the chromosome movements, a long coil-coiled region involved in the homodimerization and an inhibitory C-tail involved in autoinhibition of the N-terminal catalytic part.

翻译后修饰

The C-terminal inhibitory domain is phosphorylated. Phosphorylation relieves autoinhibition of the

kinetochore motor.

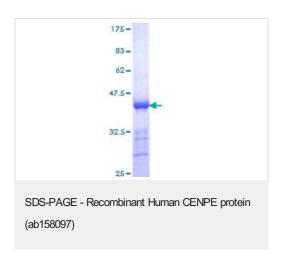
Sumoylated with SUMO2 and SUMO3. The sumoylation mediates the association to the

kinetochore.

细胞定位

Chromosome, centromere, kinetochore. Cytoplasm, cytoskeleton, spindle. Associates with kinetochores during congression (as early as prometaphase), relocates to the spindle midzone at anaphase, and is quantitatively discarded at the end of the cell division.

#### 图片



ab158097 on a 12.5% SDS-PAGE stained with Coomassie Blue.

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