



## Rabbit Anti-CENPE antibody

SL8846R

<b>Product Name:</b>	CENPE
<b>Chinese Name:</b>	着丝粒相关蛋白E抗体
<b>Alias:</b>	CENP E; Centromere associated protein E; Centromere autoantigen E (312kD); Centromere autoantigen E; Centromere protein E 312kDa; Centromere protein E; Centromeric protein E; KIF10; Kinesin family member 10; Kinesin related protein; Kinesin related protein CENPE; PPP1R61; Protein phosphatase 1, regulatory subunit 61.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,
<b>Applications:</b>	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	316kDa
<b>Cellular localization:</b>	The nucleus
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human CENPE:1951-2050/2701
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	Centrosome-associated protein E (CENPE) is a kinesin-like motor protein that accumulates in the G2 phase of the cell cycle. Unlike other centrosome-associated proteins, it is not present during interphase and first appears at the centromere region of chromosomes during prometaphase. This protein is required for stable spindle

microtubule capture at kinetochores which is a necessary step in chromosome alignment during prometaphase. This protein also couples chromosome position to microtubule depolymerizing activity. Alternative splicing results in multiple transcript variants encoding distinct protein isoforms. [provided by RefSeq, Nov 2014]

**Function:**

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.

**Subunit:**

Monomer. Interacts with CENPF, SEPT7, KIF18A, BUB1B kinase and PRC1. Interacts with NUF2; this interaction determines kinetochore localization. Interacts with SKAP; this interaction greatly favors SKAP binding to microtubules.

**Subcellular Location:**

Associates with kinetochores during congression, relocates to the spindle midzone at anaphase, and is quantitatively discarded at the end of the cell division.

**Post-translational modifications:**

The C-terminal inhibitory domain is phosphorylated. Phosphorylation relieves autoinhibition of the kinetochore motor (By similarity)

**Similarity:**

Belongs to the TRAFAC class myosin-kinesin ATPase superfamily. Kinesin family. Contains 1 kinesin motor domain.

**SWISS:**

Q02224

**Gene ID:**

1062

**Database links:**

[Entrez Gene: 1062](#) Human

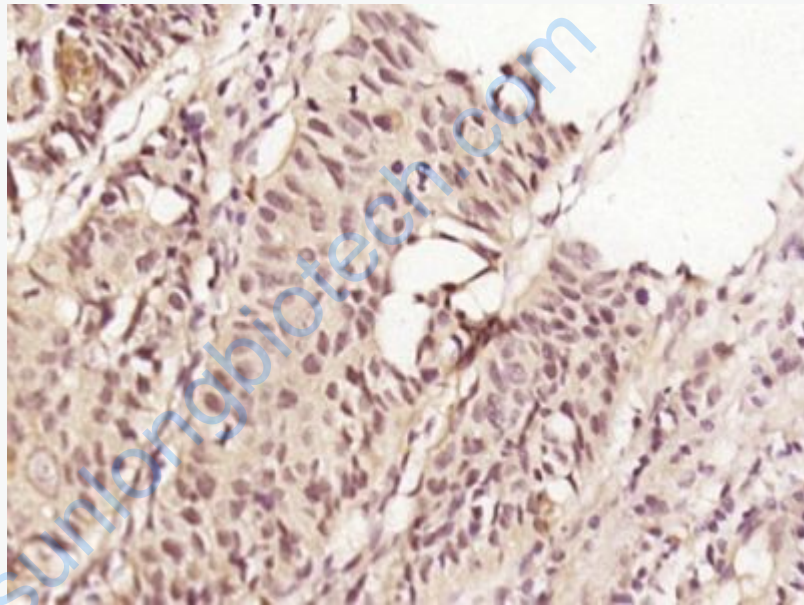
[Omin: 117143](#) Human

[SwissProt: Q02224](#) Human

[Unigene: 75573](#) Human

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



**Picture:**

Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-c-Raf(Thr269)) Polyclonal Antibody, Unconjugated (SL8846R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.