

**Goat Anti-CENPE (aa2593-2604) Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF4130a****Specification**

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**Goat Anti-CENPE (aa2593-2604) Antibody - Product Information**

Application	E
Primary Accession	<a href="#">Q02224</a>
Other Accession	<a href="#">NP_001804.2</a> , <a href="#">NP_001273663.1</a> , <a href="#">1062</a>
Reactivity	Human
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
Isotype	IgG
Calculated MW	316415

**Goat Anti-CENPE (aa2593-2604) Antibody - Additional Information****Gene ID** 1062**Other Names**

Centromere-associated protein E, Centromere protein E, CENP-E, Kinesin-related protein CENPE, CENPE

**Format**

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

**Immunogen**Peptide with sequence KREAHKQVTCEN, from the internal region of the protein sequence according to [NP\\_001804.2](#); [NP\\_001273663.1](#). Please note the peptide is available for sale.**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-CENPE (aa2593-2604) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-CENPE (aa2593-2604) Antibody - Protein Information****Name** CENPE**Function**

Microtubule plus-end-directed kinetochore motor which plays an important role in chromosome congression, microtubule-kinetochore conjugation and spindle assembly checkpoint activation. Drives chromosome congression (alignment of chromosomes at the spindle equator resulting in

the formation of the metaphase plate) by mediating the lateral sliding of polar chromosomes along spindle microtubules towards the spindle equator and by aiding the establishment and maintenance of connections between kinetochores and spindle microtubules (PubMed:<a href="http://www.uniprot.org/citations/7889940" target="\_blank">7889940</a>, PubMed:<a href="http://www.uniprot.org/citations/23891108" target="\_blank">23891108</a>, PubMed:<a href="http://www.uniprot.org/citations/25395579" target="\_blank">25395579</a>). The transport of pole-proximal chromosomes towards the spindle equator is favored by microtubule tracks that are dephosphorylated (PubMed:<a href="http://www.uniprot.org/citations/25908662" target="\_blank">25908662</a>). Acts as a processive bi-directional tracker of dynamic microtubule tips; after chromosomes have congressed, continues to play an active role at kinetochores, enhancing their links with dynamic microtubule ends (PubMed:<a href="http://www.uniprot.org/citations/23955301" target="\_blank">23955301</a>). Suppresses chromosome congression in NDC80-depleted cells and contributes positively to congression only when microtubules are stabilized (PubMed:<a href="http://www.uniprot.org/citations/25743205" target="\_blank">25743205</a>). Plays an important role in the formation of stable attachments between kinetochores and spindle microtubules (PubMed:<a href="http://www.uniprot.org/citations/17535814" target="\_blank">17535814</a>). The stabilization of kinetochore- microtubule attachment also requires CENPE-dependent localization of other proteins to the kinetochore including BUB1B, MAD1 and MAD2. Plays a role in spindle assembly checkpoint activation (SAC) via its interaction with BUB1B resulting in the activation of its kinase activity, which is important for activating SAC. Necessary for the mitotic checkpoint signal at individual kinetochores to prevent aneuploidy due to single chromosome loss (By similarity).

#### **Cellular Location**

Chromosome, centromere, kinetochore. Cytoplasm, cytoskeleton, spindle. Chromosome, centromere. Note=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 (By similarity). Recruited to the kinetochore in a SEPT7, CENPQ and TRAPPC12-dependent manner (PubMed:18460473, PubMed:25918224, PubMed:25395579). Recruited to the pericentromeric/centromeric regions of the chromosome in a CTCF- dependent manner (PubMed:26321640). {ECO:0000250|UniProtKB:Q6RT24, ECO:0000269|PubMed:18460473, ECO:0000269|PubMed:25395579, ECO:0000269|PubMed:25918224, ECO:0000269|PubMed:26321640}

#### **Goat Anti-CENPE (aa2593-2604) Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **Goat Anti-CENPE (aa2593-2604) Antibody - Images**

#### **Goat Anti-CENPE (aa2593-2604) Antibody - Background**

This antibody is expected to recognize both reported isoforms (NP\_001804.2; NP\_001273663.1).

#### **Goat Anti-CENPE (aa2593-2604) Antibody - References**

Microtubule capture by mitotic kinesin centromere protein E (CENP-E). Sardar HS, Gilbert SP. The Journal of biological chemistry 2012 Jul 287 (30): 24894-904. PMID: 22637578