## **CENPE** Rabbit mAb

Catalog No: #52215

Package Size: #52215-1 50ul #52215-2 100ul



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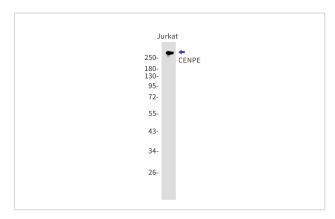
## Description

| Product Name          | CENPE Rabbit mAb   |
|-----------------------|--|
| Host Species          | Recombinant Rabbit   |
| Clonality             | Monoclonal antibody  |
| Clone No.             | S06-1G4  |
| Isotype               | Rabbit IgG   |
| Purification          | Affinity Purified  |
| Applications          | WB   |
| Species Reactivity    | Human  |
| Immunogen Description | A synthetic peptide of human CENPE   |
| Conjugates            | Unconjugated   |
| Modification          | Unmodification   |
| Other Names           | KIF10; CENP-E; MCPH13; PPP1R61   |
| Accession No.         | Swiss-Prot:Q02224GeneID:1062   |
| Uniprot               | Q02224   |
| GeneID                | 1062   |
| Calculated MW         | Calculated MW: 316 kDa; Observed MW: 316 kDa   |
| Concentration         | 0.3 mg/ml  |
| Formulation           | 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA    |
| Storage               | Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles. |

# Application Details

WB: 1/1000-1/5000

### **Images**



Western blot detection of CENPE in Jurkat lysates using CENPE antibody.Predicted band size:316kDa.Observed band size:316kDa.

#### Background

Swiss-Prot Acc.Q02224.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:7889940, PubMed:23891108, PubMed:25395579). The transport of pole-proximal chromosomes towards the spindle equator is favored by microtubule tracks that are detyrosinated (PubMed:25908662). 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:23955301). Suppresses chromosome congression in NDC80-depleted cells and contributes positively to congression only when microtubules are stabilized (PubMed:25743205). Plays an important role in the formation of stable attachments between kinetochores and spindle microtubules (PubMed:17535814) 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.

Note: This product is for in vitro research use only