

# CENPE Recombinant monoclonal antibody

Catalog Number: 86805-3-RR

## Basic Information

|                                                                |                                                   |                                                                            |
|----------------------------------------------------------------|---------------------------------------------------|----------------------------------------------------------------------------|
| <b>Catalog Number:</b><br>86805-3-RR                           | <b>GenBank Accession Number:</b><br>NM_001286734  | <b>Purification Method:</b><br>Protein A purification                      |
| <b>Size:</b><br>100ul , Concentration: 1000 µg/ml by Nanodrop; | <b>GeneID (NCBI):</b><br>1062                     | <b>CloneNo.:</b><br>251614G4                                               |
| <b>Source:</b><br>Rabbit                                       | <b>UNIPROT ID:</b><br>Q02224                      | <b>Recommended Dilutions:</b><br>WB: 1:1000-1:4000<br>IF/ICC: 1:250-1:1000 |
| <b>Isotype:</b><br>IgG                                         | <b>Full Name:</b><br>centromere protein E, 312kDa |                                                                            |
| <b>Immunogen Catalog Number:</b><br>AG27230                    | <b>Calculated MW:</b><br>316 kDa                  |                                                                            |
|                                                                | <b>Observed MW:</b><br>300-316 kDa                |                                                                            |

## Applications

|                                                  |                                                                             |
|--------------------------------------------------|-----------------------------------------------------------------------------|
| <b>Tested Applications:</b><br>WB, IF/ICC, ELISA | <b>Positive Controls:</b>                                                   |
| <b>Species Specificity:</b><br>human, mouse      | <b>WB :</b> Jurkat cells, mouse brain tissue<br><b>IF/ICC :</b> HeLa cells, |

## Background Information

Centromeric protein E (CENPE) is also named Kinesin-7. CENPE, a member of the centromere protein (CENP) family, functions as a microtubule plus-end directed motor protein that is upregulated during the G2 phase (PMID: 31115500, PMID: 7851898, PMID: 38560520). It plays a crucial role in the spindle assembly checkpoint (SAC), chromosome alignment, and microtubule capture at kinetochores during mitosis (PMID: 30784092). CENPE is essential for mitotic white matter, which accumulates during the G2 phase of the cell cycle, is consumed throughout mitosis and degrades later in the cell cycle (PMID: 33862458). CENPE regulates the cell cycle by targeting the transcription of CDK1 in the nucleus (PMID: 33862458). Studies on tumor cells have shown that CENPE plays an important role in the regulation of cell proliferation, apoptosis, migration and other activities (PMID: 33862458).

## Storage

**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
 Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

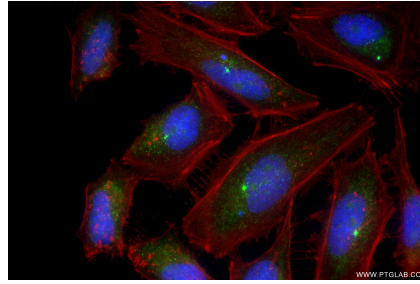
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## Selected Validation Data



Jurkat lysates were subjected to SDS PAGE followed by western blot with 86805-3-RR (CENPE antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using CENPE antibody (86805-3-RR, Clone: 251614G4 ) at dilution of 1:500 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).