

CENPE Recombinant monoclonal antibody

Catalog Number: 86805-3-RR

Basic Information

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

Applications

Tested Applications: WB, IF/ICC, ELISA	Positive Controls:
Species Specificity: human, mouse	WB : Jurkat cells, mouse brain tissue IF/ICC : 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).

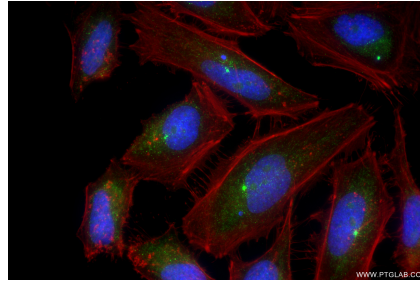
Storage

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

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).