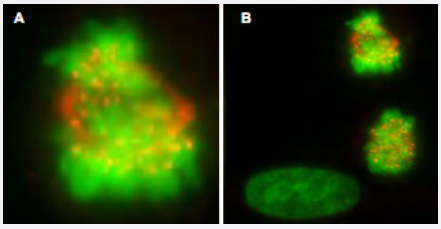
CENPE monoclonal antibody, clone 1H12

Catalog # MAB1924 Size 100 ug

Applications



Immunofluorescence

Immunofluorescence microscopy of CENPE monoclonal antibody, clone 1H12 (Cat # MAB1924) was used to detect CENPE protein visible as discrete nuclear dots on prometaphase and metaphase cells that relocate to the spindle midzone at anaphase (panel A) .
Interphase cells show no discrete staining (bottom left, panel B) .
HeLa cells were fixed in paraformaldehyde and stained using this primary antibody.
AlexaFluor 555 conjugated anti-Mouse antibody (red) was used for detection.
DNA was stained using bis-benzimide (DAPI) (green) .
Personal Communication, Tim Yen, Fox Chase Cancer Center, Philadelphia, PA.

Specification

Product Description	Mouse monoclonal antibody raised against full length recombinant.
Immunogen	Recombinant protein corresponding to full length human CENPE.
Host	Mouse
Reactivity	Human
Form	Liquid
Isotype	IgG1
Quality Control Testing	Antibody Reactive Against Recombinant Protein.

Recommend Usage	Western Blot (1:500-1:2000) Immunoprecipitation (1:200) Immunofluorescence (1:500-1:2000) The optimal working dilution should be determined by the end user.
Storage Buffer	In 20 mM KH_2PO_4, 150 mM NaCl, pH 7.2 (0.01% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

- Western Blot
- Immunofluorescence

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- Immunoprecipitation
- Enzyme-linked Immunoabsorbent Assay

Gene Info — CENPE

Entrez GeneID	1062
Protein Accession#	P49840;NP_063937
Gene Name	CENPE
Gene Alias	KIF10
Gene Description	centromere protein E, 312kDa
Omim ID	117143

Gene Ontology	Hyperlink
Gene Summary	Centrosome-associated protein E 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. CENPE is proposed to be one of the motors responsible for mammalian chromosome movement and/or spindle elongation. [provided by RefSeq
Other Designations	Centromere autoantigen E (312kD)|centromere protein E|centromere protein E (312kD)|kinesin family member 10

Publication Reference

- Characterization of the kinetochore binding domain of CENP-E reveals interactions with the kinetochore proteins CENP-F and hBUBR1.

  Chan GK, Schaar BT, Yen TJ.

  The Journal of Cell Biology 1998 Oct; 143(1):49.

- CENP-E is a putative kinetochore motor that accumulates just before mitosis.

  Yen TJ, Li G, Schaar BT, Szilak I, Cleveland DW.

  Nature 1992 Oct; 359(6395):536.

  Application: IF, IP, WB-Tr, Human, HeLa cells

- CENP-E, a novel human centromere-associated protein required for progression from metaphase to anaphase.

  Yen TJ, Compton DA, Wise D, Zinkowski RP, Brinkley BR, Earnshaw WC, Cleveland DW.

  The EMBO Journal 1991 May; 10(5):1245.

  Application: IF, WB-Ce, Human, HeLa cells

Disease

- Alcoholism
- Breast cancer
- Breast Neoplasms
- Genetic Predisposition to Disease