

#58982 Store at -20C

**CENP-F (D6X4L) Rabbit mAb****Cell Signaling**  
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**For Research Use Only. Not for Use in Diagnostic Procedures.**

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IF-IC, FC-FP	H	Endogenous	450	Rabbit IgG	#P49454	1063

**Product Usage Information****Application**

Western Blotting

Immunofluorescence (Immunocytochemistry)

Flow Cytometry (Fixed/Permeabilized)

**Dilution**

1:1000

1:800

1:50

**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

**Specificity / Sensitivity**

CENP-F (D6X4L) Rabbit mAb recognizes endogenous levels of total CENP-F protein.

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ala1794 of human CENP-F protein.

**Background**

CENP-F (mitosin), is a kinetochore-associated protein whose expression and localization to chromatin is regulated in a cell cycle-dependent manner, with its highest expression in G2/M phases (1, 2). CENP-F is required for appropriate localization of other kinetochore-associated proteins, including CENP-E. CENP-F regulates kinetochore function and maintenance of the mitotic spindle checkpoint. Farnesylation of CENP-F is required for its localization and function (3). CENP-F also interacts with the mitochondrial protein, miro, to direct the distribution of mitochondria to daughter cells as they exit mitosis (4). Researchers have shown that CENP-F drives prostate tumor growth synergistically with FOXM1 in human and mouse (5), and that the gene for CENP-F is among those frequently amplified in hepatocellular, head and neck, and esophageal carcinomas (6-8). CENP-F expression has also been shown in research studies to be associated with poor prognosis in breast cancer (9).

**Background References**

1. Rattner, J.B. et al. (1993) *Cell Motil Cytoskeleton* 26, 214-26.
2. Liao, H. et al. (1995) *J Cell Biol* 130, 507-18.
3. Ma, L. et al. (2006) *J Biomed Sci* 13, 205-13.
4. Kanfer, G. et al. (2015) *Nat Commun* 6, 8015.
5. Aytes, A. et al. (2014) *Cancer Cell* 25, 638-51.
6. Kim, H.E. et al. (2012) *PLoS One* 7, e43223.
7. Pimkhaokham, A. et al. (2000) *Jpn J Cancer Res* 91, 1126-33.
8. de la Guardia, C. et al. (2001) *Head Neck* 23, 104-12.
9. O'Brien, S.L. et al. (2007) *Int J Cancer* 120, 1434-43.

**Species Reactivity**

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

**Western Blot Buffer**

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

**Applications Key**

**WB:** Western Blotting **IF-IC:** Immunofluorescence (Immunocytochemistry)  
**FC-FP:** Flow Cytometry (Fixed/Permeabilized)

**Cross-Reactivity Key**

**H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster  
**X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse  
**GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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