



**Qty:** 100 µg/200 µL  
**Mouse anti-INCENP**  
**Catalog No.** 39-2800  
**Lot No.**

## Mouse anti-INCENP

### FORM

This monoclonal antibody is supplied as a 200 µL aliquot at a concentration of 0.5 mg/mL in PBS, pH 7.4, containing 0.1% sodium azide. This antibody is highly purified from mouse ascites by protein A chromatography.

**CLONE:** 58-217      **ISOTYPE:** Mouse IgG<sub>1</sub>

### IMMUNOGEN

Recombinant human INCENP (inner centromere protein)

### SPECIFICITY

This antibody is specific for the INCENP protein. On Western blots, it identifies the target band at ~135-155 kDa.

### REACTIVITY

Reactivity has been confirmed by Western blotting with human HeLa cell nuclear extracts and by immunofluorescence in HeLa S3 cell line.

Sample	ELISA	Immuno-fluorescence	Immuno-precipitation (native)	Western Blotting
Human	+++	+++	+++	+++
Immunogen	+++	ND	ND	NA

(Excellent +++, Good++, Poor +, No reactivity 0, Not applicable N/A, Not Determined ND)

### USAGE

Working concentrations for specific applications should be determined by the investigator. Appropriate concentrations will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature and length of incubations, etc. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

**Immunoprecipitation:** 50 µg/mL  
**Immunofluorescence:** 3-5 µg/mL  
**ELISA:** 0.5-1.0 µg/mL  
**Western Blotting:** 1-3 µg/mL

### STORAGE

Store at 2-8°C for up to one month. Store at -20°C for long-term storage. Avoid repeated freezing and thawing.

(cont'd)

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**BACKGROUND**

Chromosomal passengers are a class of proteins that show a complex and dynamic localization during mitosis. They associate along the chromosome axis during prophase, concentrate at the centromere at metaphase, and move from the centromere to the central region of the mitotic spindle at anaphase<sup>1-2</sup>. Chromosomal passengers are present in cells as a complex with at least four members, including aurora B, a protein kinase; inter centromeric protein (INCENP), an activation and targeting subunit; survivin, function unknown; and borealin, function also unknown<sup>3</sup>.

INCENP is required for normal chromosome segregation and completion of cytokinesis in *S. cerevisiae*, *X. laevis*, *C. elegans*, *D. melanogaster*, and mammalian cells. The C-terminal domain of INCENP can bind to aurora B/AIM-1 directly. At mitosis, INCENP is carried by chromosomes on the metaphase plates, where it is relocated on the centromeres as metaphase proceeds. At anaphase this protein migrates to the central spindles. INCENP is required for targeting of aurora B/AIM-1 to centromeres and midzone, because proper localization of aurora B/AIM-1 was perturbed in the cells lacking INCENP function<sup>4</sup>. A recent study also demonstrated that INCENP directly interacts with survivin, and is required for proper targeting of survivin to the centromeres and the anaphase spindle during mitosis<sup>4-6</sup>. Thus, INCENP plays an important role in chromosome segregation and cytokinesis.

**REFERENCES**

1. Sullivan BA, et al. *Environ Mol Mutagen* 28(3):182-191, 1996.
2. Adams RR, et al. *Trends Cell Biol* 11(2):49-54, 2001.
3. Morrison C, et al. *Biochem Soc Trans* 31(Pt 1):263-265, 2003.
4. Vagnarelli P, et al. *Chromosoma* 113(5):211-222, Epub 2004.
5. Wheatley SP, et al. *Curr Biol* 11(11):886-990, 2001.
6. Terada Y. *Cell Struct Funct* 26(6):653-657, 2001.
7. Earnshaw WC, et al. *Genome*. 31(2):541-552, 1989.

**RELATED PRODUCTS**

<b>Product</b>	<b>Conjugate</b>	<b>Cat. No.</b>
Protein A	Sepharose <sup>®</sup> 4B	10-1041
rec-Protein G	Sepharose <sup>®</sup> 4B	10-1241

<b>Conjugate</b>	<b>ZyMAX™ Goat x Rabbit IgG (H+L)</b>	<b>ZyMAX™ Goat x Mouse IgG (H+L)</b>
Purified	81-6100	81-6500
FITC	81-6111	81-6511
TRITC	81-6114	81-6514
Cy™3	81-6115	81-6515
Cy™5	81-6116	81-6516
HRP	81-6120	81-6520
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Biotin	81-6140	81-6540

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