



Product Information

Anti-INCENP

Developed in Rabbit
IgG Fraction of Antiserum

Product Number **I 5283**

Product Description

Anti-INCENP is developed in rabbit using as immunogen a synthetic peptide corresponding to amino acid 884-901 of human INCENP with N-terminal added cysteine, conjugated to KLH. The corresponding sequence differs by one amino acid in chicken and *Xenopus laevis* and by two amino acids in mouse. Whole antiserum is fractionated and then further purified by ion-exchange chromatography to provide the IgG fraction of antiserum that is essentially free of other rabbit serum proteins.

Anti-INCENP recognizes human, mouse, and rat INCENP. Applications include the detection of INCENP by immunoblotting (~106 kDa) and immunofluorescence. Detection of the INCENP band by immunoblotting is specifically inhibited with the immunizing peptide.

Chromosomal passenger proteins are members of a group of proteins that move from centromeres to the spindle midzone during mitosis.¹ INCENP (Inner Centromere Protein) is a chromosomal passenger protein with an essential role in mitosis and meiosis.¹⁻⁶ It is a complex highly basic multidomain protein that is dynamically translocated from metaphase chromosomes to the spindle midzone during or just prior to anaphase.³ Some INCENP transfers to the equatorial cortex before formation of the cleavage furrow.⁴ Ultimately, it is discarded in the midbody at the completion of cytokinesis.⁵ INCENP, in complex with the passenger proteins aurora-B kinase and survivin, acts at multiple points during mitosis.⁶ Studies in knockout mice established INCENP as essential for mouse development and viability. Loss of INCENP results in chromosome segregation defects and failures in cytokinesis.⁵ Targeting of survivin to its centromeric and central spindle locations during mitosis is dependent on INCENP.⁵ Direct binding of INCENP to β -tubulin has been demonstrated.⁴ Interactions of INCENP with heterochromatin protein HP1^{Hsa} and histone H2A.Z were also reported.^{7,8} INCENP levels are increased in several human cancer lines.³

Reagent

Anti-INCENP is supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 0.02 15 mM sodium azide.

Precautions and Disclaimer

Due to the sodium azide content, a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazards and safe handling practices.

Storage/Stability

For continuous use, store at 2-8 °C for up to one month. For prolonged storage, freeze in working aliquots at -20 °C. Repeated freezing and thawing is not recommended. Storage in frost-free freezers is also not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilutions should be discarded if not used within 12 hours.

Product Profile

For immunoblotting, a minimum working antibody dilution of 1:5,000 is recommended using a nuclear extract of human HeLa cells and a chemiluminescent detection reagent.

For immunoblotting, a minimum working antibody dilution of 1:2,000 is recommended using a whole extract of mouse NIH-3T3 and rat PC12 cells and a chemiluminescent detection reagent.

For indirect immunofluorescence, a minimum working antibody dilution of 1:100 is recommended using human HeLa cells.

Note: In order to obtain the best results using various techniques and preparations, we recommend determining the optimal working dilutions by titration.

References

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