

INCENP (B-4): sc-376514

BACKGROUND

A replicated chromosome includes two kinetochores that control chromosome segregation during mitosis. The centromere proteins CENP-A, CENP-B, CENP-C, CENP-E, CENP-F (also designated mitosin), CENP-H and INCENP are kinetochore proteins that are involved in mitotic events. The centromere proteins are expressed at different levels throughout the cell cycle and are involved in the formation of the centromere and the organization and function of the kinetochore. INCENP, which also is designated inner centromere protein, is a chromosomal passenger protein that is crucial for chromosome segregation. During mitosis it is also required for cytokinesis onset. This protein, which can form a homodimer or a heterodimer, binds directly to microtubules and interacts with AURKB, AURKC, CBX3 and β Tubulin. This nuclear protein localizes to the mitotic spindle, metaphase chromosomes and during anaphase, to the equatorial cortex.

CHROMOSOMAL LOCATION

Genetic locus: INCENP (human) mapping to 11q12.3; Incenp (mouse) mapping to 19 A.

SOURCE

INCENP (B-4) is a mouse monoclonal antibody raised against amino acids 766-918 mapping at the C-terminus of INCENP of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

INCENP (B-4) is available conjugated to agarose (sc-376514 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376514 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376514 PE), fluorescein (sc-376514 FITC), Alexa Fluor[®] 488 (sc-376514 AF488), Alexa Fluor[®] 546 (sc-376514 AF546), Alexa Fluor[®] 594 (sc-376514 AF594) or Alexa Fluor[®] 647 (sc-376514 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-376514 AF680) or Alexa Fluor[®] 790 (sc-376514 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

INCENP (B-4) is recommended for detection of INCENP of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for INCENP siRNA (h): sc-60848, INCENP siRNA (m): sc-60849, INCENP shRNA Plasmid (h): sc-60848-SH, INCENP shRNA Plasmid (m): sc-60849-SH, INCENP shRNA (h) Lentiviral Particles: sc-60848-V and INCENP shRNA (m) Lentiviral Particles: sc-60849-V.

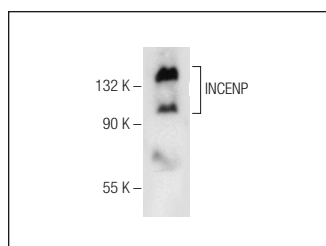
Molecular Weight of INCENP: 120 kDa.

Positive Controls: mouse prostate extract: sc-364249, TK-1 whole cell lysate: sc-364798 or Jurkat whole cell lysate: sc-2204.

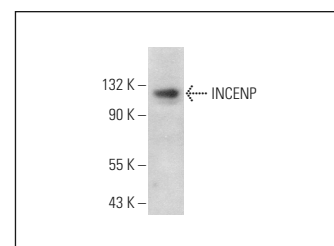
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



INCENP (B-4): sc-376514. Western blot analysis of INCENP expression in Jurkat whole cell lysate.



INCENP (B-4): sc-376514. Western blot analysis of INCENP expression in TK-1 whole cell lysate.

SELECT PRODUCT CITATIONS

- Ideue, T., et al. 2014. Involvement of satellite I noncoding RNA in regulation of chromosome segregation. *Genes Cell* 19: 528-538.
- Abadía-Molina, F., et al. 2017. Neuronal apoptosis inhibitory protein (NAIP) localizes to the cytokinetic machinery during cell division. *Sci. Rep.* 7: 39981.
- Park, J., et al. 2018. USP35 regulates mitotic progression by modulating the stability of Aurora B. *Nat. Commun.* 9: 688.
- Lodovichi, S., et al. 2019. Computational analysis of data from a genome-wide screening identifies new PARP1 functional interactors as potential therapeutic targets. *Oncotarget* 10: 2722-2737.
- Sun, M., et al. 2019. Targeting the chromosomal passenger complex subunit INCENP induces polyploidization, apoptosis, and senescence in neuroblastoma. *Cancer Res.* 79: 4937-4950.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

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