abcam

Product datasheet

Anti-INCENP antibody ab12183

6 Abreviews 15 References 3 Images

Overview

Product name	Anti-INCENP antibody
Description	Rabbit polyclonal to INCENP
Tested applications	**Suitable for:** WB, ICC/IF, ICC, IHC-Fr, IP
Species reactivity	**Reacts with:** Mouse, Rat, Human, Xenopus laevis **Predicted to work with:** Chicken
Immunogen	Synthetic peptide: SKPRYHKRTSSAVWNSP (with N-terminal added cysteine) conjugated to KLH, corresponding to amino acids 884-901 of Human INCENP. Run BLAST with Run BLAST with
Positive control	Nuclear/whole extract of human HeLa cells.
General notes	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. There is some debate about whether this antibody is suitable for use in IF and we would be most interested to hear from researchers who test this antibody in this application. The antibody has been reported to be suitable for use in IF at a dilution of 1/100 using HeLa cells (see image below). However, one of our customers used this product in HeLa cells and reported an unusual staining pattern - please see the enquiries section of the online datasheet for further details.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	Preservative: 15mM Sodium Azide Constituents: 0.01M PBS, pH 7.4
Purity	IgG fraction
Purification notes	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.
Clonality	Polyclonal
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab12183** in the following tested applications.

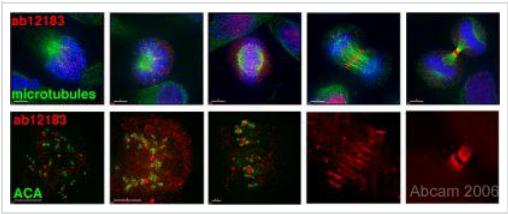
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/2000 - 1/5000. Detects a band of approximately 106 kDa (predicted molecular weight: 106 kDa).
ICC/IF	★★★★☆	Use at an assay dependent concentration.
ICC	★★★★☆	1/100.
IHC-Fr	★★★★☆	Use at an assay dependent concentration.
IP		1/250.

Target

Function	Component of the chromosomal passenger complex (CPC), a complex that acts as a key regulator of mitosis. The CPC complex has essential functions at the centromere in ensuring correct chromosome alignment and segregation and is required for chromatin-induced microtubule stabilization and spindle assembly. Probably acts through association with AURKB or AURKC. Seems to bind directly to microtubules. Controls the kinetochore localization of BUB1.
Sequence similarities	Belongs to the INCENP family.
Cellular localization	Chromosome > centromere. Cytoplasm > cytoskeleton > spindle. Nucleus. Chromosome > centromere > kinetochore. Localizes to inner kinetochore. Localizes on chromosome arms and inner centromeres from prophase through metaphase and then transferring to the spindle midzone and midbody from anaphase through cytokinesis. Colocalizes with AURKB at mitotic chromosomes.

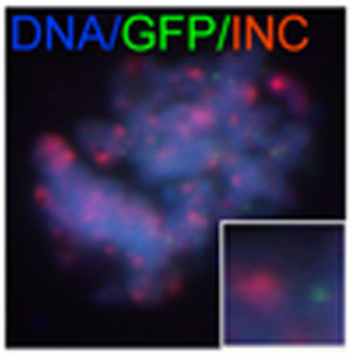
Images



Immunocytochemistry/ Immunofluorescence - Anti-INCENP antibody (ab12183)

This image was taken from an Abreview submitted on November 30, 2005 by William Moore. We do not have any further information relating to this image.

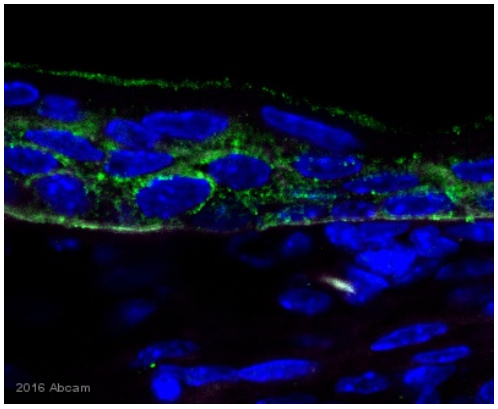
HeLa cells were fixed for 10mins in fresh 3.7% paraformaldehyde, permeabilised with PBS + 0.1% Triton X 100, and blocked with 1% goat serum in Abdil. The primary antibody (in Abdil) was incubated OVERNIGHT (1 hour didn't work) at room temperature at a dilution of 1/150. The cells were co-stained with mouse anti-tubulin (secondary is Anti-Mouse Alexa 488) and ACA (Human anti centromere marker, secondary is Anti-Human Cy5) and DAPI. The figure shows projected images of dividing cells (prophase, prometaphase, metaphase, anaphase, telophase). The top panels show ab12183, DNA and microtubule stains. The lower panels are the same cells, showing a subset of optical sections at higher magnification. ACA (geen) stains centromeres and ab12183 (red) stains the inner centromere in prophase, prometaphase, and metaphase. The ab12183 channel has been linerally scaled to reduce the background staining associated with this antibody.



Immunocytochemistry/ Immunofluorescence - Anti-INCENP antibody (ab12183)

Image from BS Freedman et al, PLoS One 5: (2010), Fig 3.

Demembranated sperm nuclei and CSF (cytostatic factor-arrested) low-speed egg extracts were prepared in XB and reacted at room temperature as described. Proteins were added to extract prior to sperm addition or else immediately after sperm addition into XB buffer (100 mM KCl, 1 mM MgCl2, 0.1 mM CaCl2, 10 mM K-HEPES pH 7.7, 50 mM sucrose) supplemented with energy mix (3.75 mM creatinine phosphate, 0.5 mM Na2-ATP, 0.5 mM MgCl2, 50 µM EGTA). To label damaged DNA, biotin-16-dUTP was added to metaphase reactions to a final concentration of 40 µM. 30 minutes after sperm addition, reactions were diluted 1/10 into XB supplemented with 1 mM MgCl2, 5 mM EGTA, 0.25% Triton X-100, and 10% formaldehyde and processed for Immunofluorescence. Antibody used ab12183 (red).



Immunohistochemistry (Frozen sections) - Anti-INCENP antibody (ab12183)

This image is courtesy of an Abreview submitted by Dr Kirk McManus, Univ. of Manitoba/Cancer Care MICB.

Immunohistochemistry (Frozen sections) analysis of mouse embryonic skin - keratinocytes tissue sections labeling INCENP with ab12183. Tissue was fixed with paraformaldehyde, permeabilized with 10% Triton-X (0.05% Final) and blocked with Gelatin for 1 hour at 20°C. Samples were incubated with primary antibody (1/200) for 12 hours at 4°C. An undiluted Alexa Fluor 488 donkey anti-rabbit IgG polyclonal was used as the secondary antibody.

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit http://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors