


Product datasheet

Anti-CENPB antibody ab25734

KO VALIDATED

★★★★★ [6 Abreviews](#) [44 References](#) [5 Images](#)

Overview

Product name	Anti-CENPB antibody
Description	Rabbit polyclonal to CENPB
Host species	Rabbit
Tested applications	Suitable for: WB, ICC/IF, ICC
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat, Sheep, Hamster 
Immunogen	Synthetic peptide conjugated to KLH derived from within residues 550 to the C-terminus of Human CENPB. Read Abcam's proprietary immunogen policy (Peptide available as ab28019 .)
Positive control	ICC: HeLa cells. WB: A431, Jurkat, Daudi and HeLa cell lysates.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.
Purity	Immunogen affinity purified

Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab25734 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)	Use a concentration of 1 - 5 µg/ml. Detects a band of approximately 65 kDa (predicted molecular weight: 65 kDa).
ICC/IF	★★★★★ (5)	1/200 - 1/1000.
ICC		Use a concentration of 1 µg/ml.

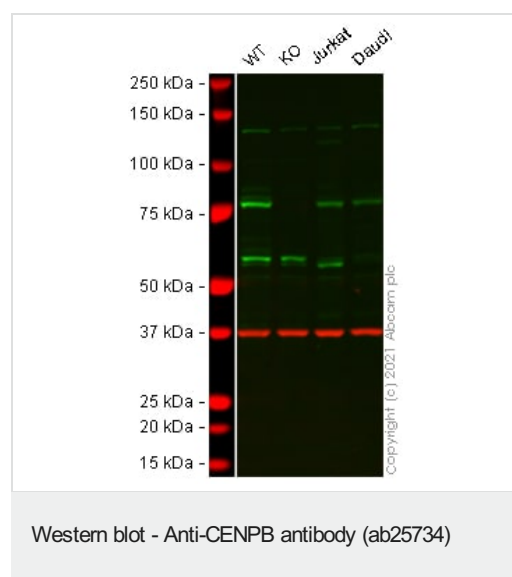
Target

Function Interacts with centromeric heterochromatin in chromosomes and binds to a specific subset of alphoid satellite DNA, called the CENP-B box. May organize arrays of centromere satellite DNA into a higher order structure which then directs centromere formation and kinetochore assembly in mammalian chromosomes.

Sequence similarities Contains 1 HTH CENPB-type DNA-binding domain.
Contains 1 HTH psq-type DNA-binding domain.

Cellular localization Nucleus. Chromosome > centromere.

Images



All lanes : Anti-CENPB antibody (ab25734) at 1 µg/ml

Lane 1 : Wild-type A-431 (Human epidermoid carcinoma cell line) whole cell lysate

Lane 2 : CENPB knockout A-431 (Human epidermoid carcinoma cell line) whole cell lysate

Lane 3 : Jurkat (Human T cell leukemia cell line from peripheral blood) whole cell lysate

Lane 4 : Daudi (Human Burkitt's lymphoma cell line) whole cell lysate

Lysates/proteins at 20 µg per lane.

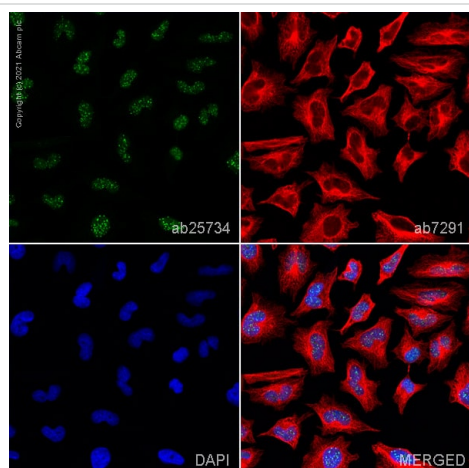
Performed under reducing conditions.

Predicted band size: 65 kDa

Observed band size: 77 kDa

Lanes 1 - 4: Merged signal (red and green). Green - ab25734 observed at 77 kDa. Red - loading control **ab8245** (Mouse anti-GAPDH antibody [6C5]) observed at 37 kDa.

ab25734 was shown to react with CENPB in wild-type A431 cells in Western blot with loss of signal observed in CENPB knockout sample. Wild-type A431 and CENPB knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3 % milk in TBS-T (0.1 % Tween®) before incubation with ab25734 and **ab8245** (Mouse anti-GAPDH antibody [6C5]) overnight at 4°C at 1 µg/ml and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 h at room temperature before imaging.



Immunocytochemistry/ Immunofluorescence - Anti-CENPB antibody (ab25734)

ab25734 staining CENPB in HeLa cells. The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.1% PBS-Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab25734 at 1 µg/ml and **ab7291**, Mouse monoclonal [DM1A] to alpha Tubulin - Loading Control. Cells were then incubated with **ab150120**, Goat polyclonal Secondary Antibody to Mouse IgG - H&L (Alexa Fluor® 594), pre-adsorbed at 1/1000 dilution (shown in green) and **ab150081**, Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 488), pre-adsorbed at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue).

Also suitable in cells fixed with 100% methanol (5 min).

Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown.

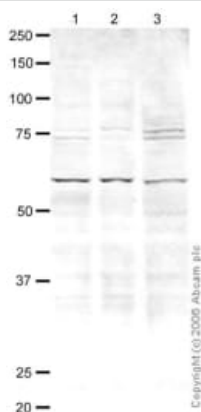


Immunocytochemistry/ Immunofluorescence - Anti-CENPB antibody (ab25734)

Image courtesy of an AbReview by Weiguo Zhang

4% paraformaldehyde-fixed, 0.2% Triton X-100 permeabilized HeLa (human epithelial cell line from cervix adenocarcinoma) cells stained for CENPB (red) using ab25734 at 1/200 dilution in ICC/IF.

The nuclear counterstain is DAPI (blue). Alpha-Tubulin is stained with an mouse monoclonal anti-alpha Tubulin antibody (green).



Western blot - Anti-CENPB antibody (ab25734)

All lanes : Anti-CENPB antibody (ab25734) at 1 µg/ml

Lane 1 : HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

Lane 2 : Jurkat whole cell lysate ([ab7899](#))

Lane 3 : A-431 whole cell lysate ([ab7909](#))

Lysates/proteins at 20 µg per lane.

Secondary

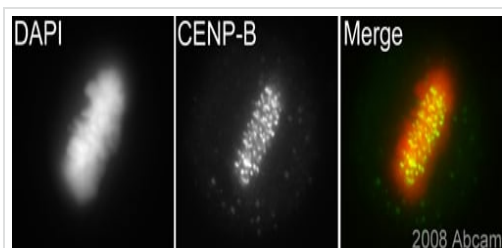
All lanes : Goat polyclonal to Rabbit IgG (Alexa Fluor® 680) at 1/10000 dilution

Developed using the ECL technique.

Predicted band size: 65 kDa

Observed band size: 65 kDa

Additional bands at: 74 kDa (possible cross reactivity), 75 kDa (possible cross reactivity)



Immunocytochemistry - Anti-CENPB antibody
(ab25734)

This image is courtesy of an Abreview submitted by Dr Kirk McManus

ab25734 (1/1000) staining CENPB in HeLa cells (green). Cells were fixed with methanol and counterstained with DAPI in order to highlight the nucleus (red). Please refer to abreview for further experimental details.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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 <https://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