

Product datasheet

Anti-Cdc25C antibody [E303] ab32050

KO VALIDATED Recombinant RabMAb

[3 References](#) [4 Images](#)

Overview

Product name	Anti-Cdc25C antibody [E303]
Description	Rabbit monoclonal [E303] to Cdc25C
Host species	Rabbit
Specificity	ab32050 recognises Cdc25C. It does not cross react with other MPI phosphatase family members.
Tested applications	Suitable for: WB, Flow Cyt, IP Unsuitable for: ICC/IF or IHC
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide within Human Cdc25C aa 450-550 (C terminal). The exact sequence is proprietary.
Positive control	WB: HeLa, Hap1 and A431 cell lysates.
General notes	<p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise[™] guarantee.</p> <p>In preparation for this, we have started to update the applications & species that this product is</p>

Abpromise guaranteed for.

We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. 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, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 49% PBS, 50% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	IgG fraction
Clonality	Monoclonal
Clone number	E303
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab32050** 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		1/1000 - 1/10000. Detects a band of approximately 54 kDa (predicted molecular weight: 53 kDa).
Flow Cyt		1/10. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
IP		1/30.

Application notes Is unsuitable for ICC/IF or IHC.

Target


Function Functions as a dosage-dependent inducer in mitotic control. It is a tyrosine protein phosphatase required for progression of the cell cycle. It directly dephosphorylates CDK1 and activate its kinase activity.

Sequence similarities Belongs to the MPI phosphatase family.
Contains 1 rhodanese domain.


Developmental stage	Expressed predominantly in G2 phase.
Post-translational modifications	Phosphorylated by CHK1 on Ser-216. This phosphorylation creates a binding site for 14-3-3 protein and inhibits the phosphatase. Phosphorylated by PLK4.
Cellular localization	Nucleus.

Images


Why choose a recombinant antibody?




Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology

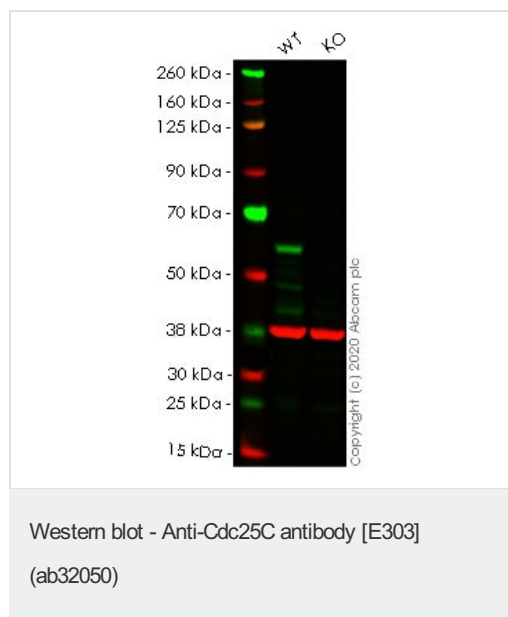


Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-Cdc25C antibody [E303] (ab32050)



All lanes : Anti-Cdc25C antibody [E303] (ab32050) at 1/1000 dilution

Lane 1 : Wild-type HeLa cell lysate

Lane 2 : CDC25C knockout HeLa cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 53 kDa

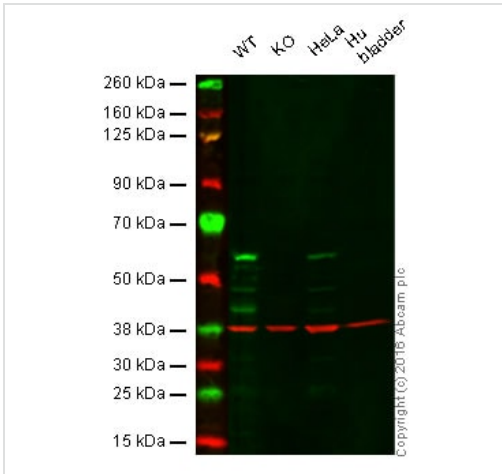
Observed band size: 58 kDa

[why is the actual band size different from the predicted?](#)

Lanes 1-2: Merged signal (red and green). Green - ab32050 observed at 58 kDa. Red - Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) observed at 37 kDa.

ab32050 was shown to react with Cdc25C in wild-type HeLa cells in western blot. Loss of signal was observed when knockout cell line [ab265189](#) (knockout cell lysate [ab257387](#)) was used. Wild-type

HeLa and CDC25C knockout HeLa cell lysates were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. ab32050 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) were incubated overnight at 4°C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye®800CW) preadsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye®680RD) preadsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-Cdc25C antibody [E303] (ab32050)

Lane 1: Wild-type HAP1 cell lysate (20 µg)

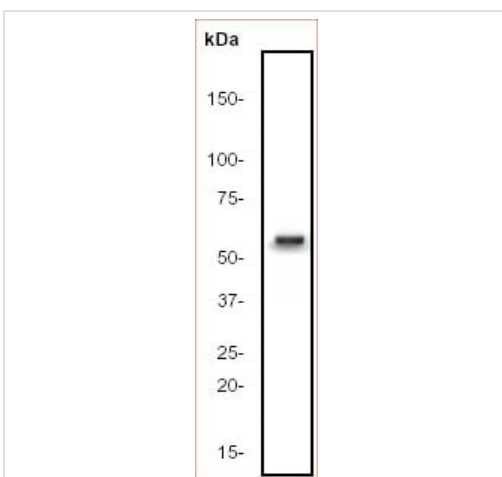
Lane 2: Cdc25C knockout HAP1 cell lysate (20 µg)

Lane 3: HeLa cell lysate (20 µg)

Lane 4: Human bladder lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab32050 observed at 58 kDa. Red - loading control, ab8245, observed at 37 kDa.

ab32050 was shown to specifically react with Cdc25C when Cdc25C knockout samples were used. Wild-type and Cdc25C knockout samples were subjected to SDS-PAGE. ab32050 and ab8245 (loading control to GAPDH) were diluted 1/1000 and 1/10 000 and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ab216773 and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed ab216776 secondary antibodies at 1/10 000 dilution for 1 h at room temperature before imaging.



Western blot - Anti-Cdc25C antibody [E303] (ab32050)

Anti-Cdc25C antibody [E303] (ab32050) at 1/1000 dilution + A431 cell lysate

Predicted band size: 53 kDa

Observed band size: 54 kDa [why is the actual band size different from the predicted?](#)

Our Abpromise to you: Quality guaranteed and expert technical support

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- Response to your inquiry within 24 hours

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