

Product datasheet

Anti-Cyclin E1 antibody [EPR194] ab133266

KO VALIDATED

Recombinant

RabMAb

★★★★☆ 3 Abreviews 17 References 8 Images

Overview

Product name	Anti-Cyclin E1 antibody [EPR194]
Description	Rabbit monoclonal [EPR194] to Cyclin E1
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), WB, ICC/IF Unsuitable for: IHC-P
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: HeLa whole cell lysate (ab150035), MCF7 cell lysate, JAR cell lysate, K562 cell lysate and Wild-type HAP1 whole cell lysate. ICC/IF: HeLa cells Flow Cyt (Intra): MCF7 cells
General notes	<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>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>

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 long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA
Purity	Protein A purified

Clonality	Monoclonal
Clone number	EPR194
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab133266 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

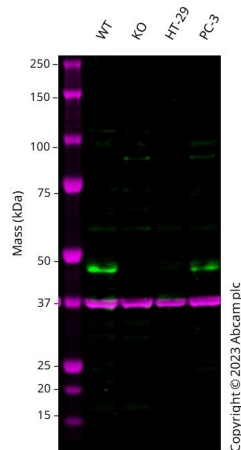
Application	Abreviews	Notes
Flow Cyt (Intra)		1/150.
WB	★★★★★ (1)	1/1000 - 1/10000. Detects a band of approximately 42-50 kDa (predicted molecular weight: 47 kDa).
ICC/IF	★★★★★ (2)	1/1000. For unpurified use at 1:500.

Application notes Is unsuitable for IHC-P.

Target

Function	Essential for the control of the cell cycle at the G1/S (start) transition.
Tissue specificity	Highly expressed in testis and placenta. Low levels in bronchial epithelial cells.
Sequence similarities	Belongs to the cyclin family. Cyclin E subfamily.
Post-translational modifications	Phosphorylation of Thr-395 by GSK3 and of Ser-399 by CDK2 accelerates degradation via the ubiquitin proteasome pathway. Phosphorylated upon DNA damage, probably by ATM or ATR.
Cellular localization	Nucleus.

Images



Western blot - Anti-Cyclin E1 antibody [EPR194]
(ab133266)

All lanes : Anti-Cyclin E1 antibody [EPR194] (ab133266) at
1/1000 dilution

Lane 1 : Wild-type MCF7 cell lysate

Lane 2 : CCNE1 knockout MCF7 cell lysate

Lane 3 : HT-29 cell lysate

Lane 4 : PC-3 cell lysate

Lysates/proteins at 20 µg per lane.

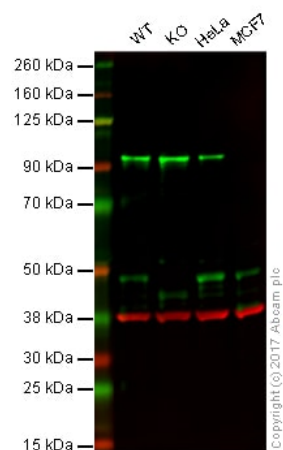
Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 47 kDa

Observed band size: 47 kDa

Western blot: Anti-CCNE1 antibody [EPR194] (ab133266) staining at 1/1000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] ([ab8245](#)) loading control staining at 1/20000 dilution, shown in magenta. In Western blot, ab133266 was shown to bind specifically to CCNE1. A band was observed at 47 kDa in wild-type MCF7 cell lysates with no signal observed at this size in CCNE1 knockout cell line [ab286303](#) (knockout cell lysate AB300211). To generate this image, wild-type and CCNE1 knockout MCF7 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3% milk in TBS-0.1% Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4°C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution.



Western blot - Anti-Cyclin E1 antibody [EPR194]
(ab133266)

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

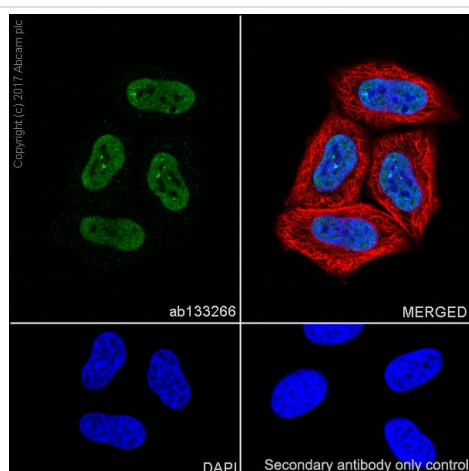
Lane 2: Cyclin E1 knockout HAP1 whole cell lysate (20 µg)

Lane 3: HeLa whole cell lysate (20 µg)

Lane 4: MCF7 whole cell lysate (20 µg)

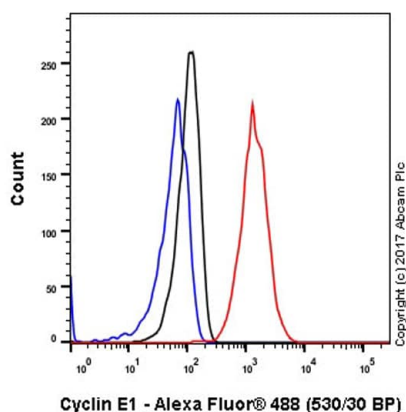
Lanes 1 - 4: Merged signal (red and green). Green - ab133266 observed at 47 kDa. Red - loading control, [ab9484](#), observed at 37 kDa.

Unpurified ab133266 was shown to recognize Cyclin E1 in wild-type cells as signal was lost at the expected MW in Cyclin E1 knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and Cyclin E1 knockout samples were subjected to SDS-PAGE. Ab133266 and [ab9484](#) (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/20000 dilution respectively. Blots were developed 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 1/20000 dilution for 1 hour at room temperature before imaging.

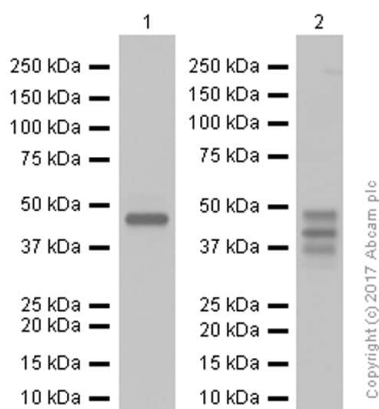


Immunocytochemistry/ Immunofluorescence - Anti-Cyclin E1 antibody [EPR194] (ab133266)

Immunocytochemistry/ Immunofluorescence analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling Cyclin E1 with Purified ab133266 at 1:1000 dilution (1.6µg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5 µg/ml). [ab150077](#) Goat anti rabbit IgG(Alexa Fluor® 488) was used as the secondary antibody at 1:1000 dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Flow Cytometry (Intracellular) - Anti-Cyclin E1 antibody [EPR194] (ab133266)



Western blot - Anti-Cyclin E1 antibody [EPR194] (ab133266)

Intracellular Flow Cytometry analysis of MCF7 (Human breast adenocarcinoma epithelial cell) cells labeling Cyclin E1 with purified ab133266 at 1/150 dilution (10 µg/ml) (red). Cells were fixed with 4% Paraformaldehyde. A Goat anti rabbit IgG (Alexa Fluor® 488) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).

All lanes : Anti-Cyclin E1 antibody [EPR194] (ab133266) at 1/10000 dilution (purified)

Lane 1 : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

Lane 2 : JAR (Human placenta choriocarcinoma epithelial cell) whole cell lysates

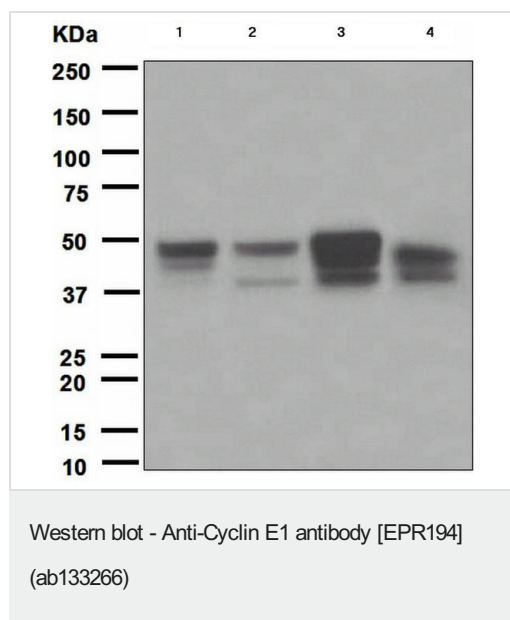
Lysates/proteins at 15 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

Predicted band size: 47 kDa

Blocking and diluting buffer : 5% NFDM/TBST



All lanes : Anti-Cyclin E1 antibody [EPR194] (ab133266) at 1/1000 dilution (unpurified)

Lane 1 : HeLa cell lysate

Lane 2 : MCF7 cell lysate

Lane 3 : JAR cell lysate

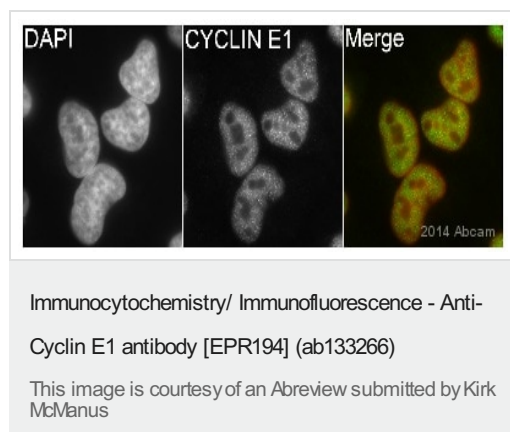
Lane 4 : K562 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat anti-rabbit HRP conjugated antibody at 1/2000 dilution

Predicted band size: 47 kDa



Unpurified ab133266 staining Cyclin E1 in HeLa cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with paraformaldehyde and permeabilized with 0.5% Triton X-100 in PBS. Samples were incubated with primary antibody (1/500 in PBS) for 1 hour at 22°C. [ab150081](#), an Alexa Fluor® 488-conjugated goat anti-rabbit IgG polyclonal (1/200) was used as the secondary antibody. Counterstained with DAPI.

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-Cyclin E1 antibody [EPR194] (ab133266)

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

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