abcam

ab208696

Anti-Cyclin E1 antibody [EP435E] - BSA and Azide free

Anti-Cyclin E1 antibody [EP435E] - BSA and Azide free (ab208696) is a rabbit recombinant monoclonal antibody provided in a PBS only buffer for easy conjugation detecting Cyclin E1 in **Western Blot, Flow Cytometry (Intra), IP, IHC-P, ICC/IF**. Suitable for **Human**.

- KO validated for confirmed specificity
- BSA, sodium azide, and glycerol-free for easy conjugation
- Biophysical QC for unrivalled batch-batch consistency

Recombinant | RabMAb | KO Validated

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EP435E
Purification technique	Affinity purification Protein A
Specificity	This antibody recognises Cyclin E1. It is predicted to detect the splice isoform 2 based on sequence analysis.
Concentration	1.042 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	-
Notes	-

IP

Tested

Species	Human
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	ab199376 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Target data

See full target information CCNE1

Function	Essential for the control of the cell cycle at the G1/S (start) transition.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

What is this antibody validated in?
Anti-Cyclin E1 antibody [EP435E] - BSA and Azide free (ab208696) is a rabbit recombinant monoclonal antibody and is validated for use in Western Blot (WB), Flow Cytometry (Intra), Immunoprecipitation (IP), Immunohistochemistry (IHC-P), Immunocytochemistry/immunofluorescence (ICC/IF) in Human samples.

What is the molecular weight of Cyclin E1?
Anti-Cyclin E1 [EP435E] - BSA and Azide free (ab208696) specifically detects a band for Cyclin E1 (UniProt: P24864) at a molecular weight of 47kDa.

Specificity confirmed
The specificity of Anti-Cyclin E1 antibody [EP435E] - BSA and Azide free (ab208696) has been confirmed by Western blot testing in CCNE1 Knockout HAP1 cells.

Other related products
We have a range of other formats of antibody clone [EP435E] also available for your convenience: ab33911, Alexa Fluor® 647 - ab194069, HRP - ab194070, Carrier free - ab208696

Species reactivity
Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Conjugation ready
Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility
This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

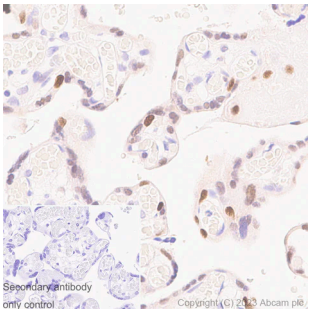
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

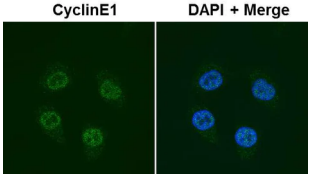
Full details and terms and conditions can be found here:
Terms & Conditions.

14 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cyclin E1 antibody [EP435E] - BSA and Azide free (ab208696)

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab33911). Immunohistochemical analysis of paraffin-embedded Human placenta tissue labeling Cyclin E1 with ab33911 at 1/2000 (0.12 µg/ml) dilution followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Nuclear staining on the human placenta. The section was incubated with ab33911 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins

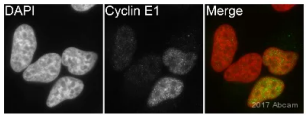


This image is courtesy of an anonymous customer review.

Immunocytochemistry/ Immunofluorescence - Anti-Cyclin E1 antibody [EP435E] - BSA and Azide free (ab208696)

Cyclin E1 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Cyclin E1 antibody

ab33911 staining Cyclin E1 in HeLa cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with paraformaldehyde, permeabilized with 0.2% Triton X-100 and blocked with 2% BSA for 45 minutes at room temperature. Samples were incubated with primary antibody (1/300 in PBS + 2% BSA) for 14 hours at 4°C. An Alexa Fluor® 488-conjugated goat anti-rabbit IgG polyclonal (1/500) was used as the secondary antibody.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab33911) (unpurified).

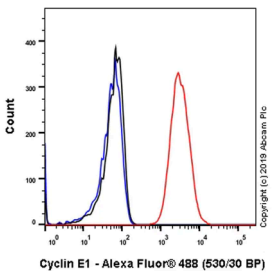


This image is courtesy of a customer review submitted by Kirk McManus.

Immunocytochemistry/ Immunofluorescence - Anti-Cyclin E1 antibody [EP435E] - BSA and Azide free (ab208696)

Cyclin E1 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Cyclin E1 antibody

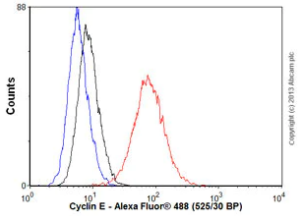
Immunocytochemistry/Immunofluorescence analysis of HeLa cells labeling Cyclin E1 with ab33911 at 1/500 dilution. Cells were fixed in paraformaldehyde and permeabilized with 0.5% Triton X-100 in PBS. Staining with ab33911 at 1/500 was carried out for 1 hour at 22°C in PBS buffer. ab150081, a Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed secondary antibody, was used at 1/200 dilution. DAPI was used to counterstain.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab33911) (unpurified).



Flow Cytometry (Intracellular) - Anti-Cyclin E1 antibody [EP435E] - BSA and Azide free (ab208696)

Cyclin E1 Flow Cytometry (Intracellular) staining using rabbit Anti-Cyclin E1 antibody

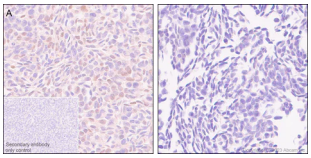
Intracellular Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling Cyclin E1 with Purified ab33911 at 1/30 dilution (10 µg/mL) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue). This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab33911).



Flow Cytometry (Intracellular) - Anti-Cyclin E1 antibody [EP435E] - BSA and Azide free (ab208696)

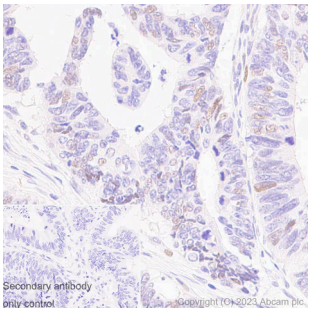
Cyclin E1 Flow Cytometry (Intracellular) staining using rabbit Anti-Cyclin E1 antibody

Overlay histogram showing MCF7 cells stained with ab33911 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab33911, 1/1000 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H&L) (ab150077) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (0.1µg/1x10^6 cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter. This antibody gave a positive signal in MCF7 cells fixed with 80% methanol (5 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab33911) (unpurified).



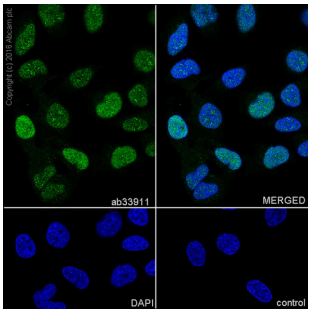
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cyclin E1 antibody [EP435E] - BSA and Azide free (ab208696)

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab33911). Immunohistochemical analysis of paraffin-embedded (A) Wild-type HAP1 (human chronic myelogenous leukemia near-haploid cell) cell pellets (B)CCNE1 KO HAP1 cell pellets tissue labeling Cyclin E1 with ab33911 at 1/2000 (0.12 µg/ml) dilution followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Nuclear staining on (A) Wild-type HAP1 cell pellets, no staining on (B) CCNE1 KO HAP1 cell pellets.The section was incubated with ab33911 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cyclin E1 antibody [EP435E] - BSA and Azide free (ab208696)

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab33911). Immunohistochemical analysis of paraffin-embedded Human colon carcinoma tissue labeling Cyclin E1 with ab33911 at 1/2000 (0.12 µg/ml) dilution followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Nuclear staining on the human colon carcinoma. The section was incubated with ab33911 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins

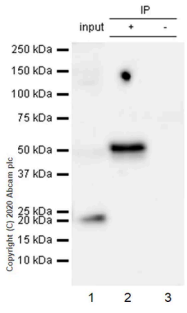


Immunocytochemistry/ Immunofluorescence - Anti-Cyclin E1 antibody [EP435E] - BSA and Azide free (ab208696)

Cyclin E1 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Cyclin E1 antibody

Immunocytochemistry/Immunofluorescence analysis of HeLa (human cervix adenocarcinoma) cells labeling Cyclin E1 (green) with purified ab33911 at 1/500. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. ab150077, Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody. Nuclei were counterstained with DAPI (blue).
Secondary Only Control: PBS was used instead of the primary antibody as the negative control.

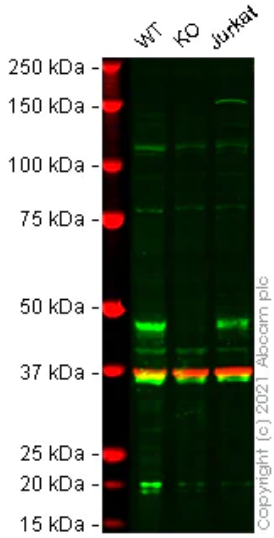
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab33911).



Immunoprecipitation - Anti-Cyclin E1 antibody [EP435E] - BSA and Azide free (ab208696)

Purified ab33911 at 1/30 dilution (2ug) immunoprecipitating Cyclin E1 in HeLa whole cell lysate.
Lane 1 (input): HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate (10µg)
Lane 2 (+): ab33911 + HeLa whole cell lysate.
Lane 3 (-): Rabbit monoclonal IgG (ab172730) instead of ab33911 in HeLa whole cell lysate.
VeriBlot for IP Detection Reagent (HRP) (ab131366) (1/1000) was used for Western blotting.
Blocking Buffer and concentration: 5% NFDM/TBST.
Diluting buffer and concentration: 5% NFDM/TBST.
Observed band size: 50 kDa
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab33911).
All lanes:
Immunoprecipitation - Anti-Cyclin E1 antibody [EP435E] (ab33911)

Predicted band size: 47 kDa



Western blot - Anti-Cyclin E1 antibody [EP435E] - BSA and Azide free (ab208696)

Cyclin E1 Western blot staining using rabbit Anti-Cyclin E1 antibody

False colour image of Western blot: Anti-Cyclin E1 antibody [EP435E] staining at 1/1000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] (ab8245) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab33911 was shown to bind specifically to Cyclin E1. A band was observed at 47 kDa in wild-type HAP1 cell lysates with no signal observed at this size in CCNE1 knockout cell line. To generate this image, wild-type and CCNE1 knockout HAP1 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 (IRDye® 800CW) preabsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (ab216776) at 1/20000 dilution.
All lanes:
Western blot - Anti-Cyclin E1 antibody [EP435E] (ab33911) at 1/1000 dilution

Lane 1:
Wild-type HAP1 cell lysate at 20 µg

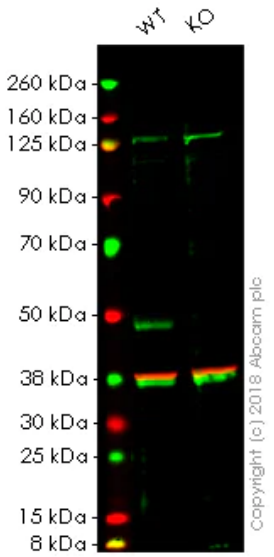
Lane 2:
CCNE1 knockout HAP1 cell lysate at 20 µg

Lane 3:
Jurkat cell lysate at 20 µg

Performed under reducing conditions.

Predicted band size: 47 kDa

Observed band size: 47 kDa



Western blot - Anti-Cyclin E1 antibody [EP435E] - BSA and Azide free (ab208696)

Cyclin E1 Western blot staining using rabbit Anti-Cyclin E1 antibody

Lanes 1 - 2: Merged signal (red and green). Green - ab33911 observed at 47 kDa. Red - loading control, ab9484, observed at 37 kDa.
ab33911 was shown to recognize CCNE1 in wild-type HAP1 cells as signal was lost at the expected MW in CCNE1 (Cyclin E1) knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and CCNE1 (Cyclin E1) knockout samples were subjected to SDS-PAGE. ab33911 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.

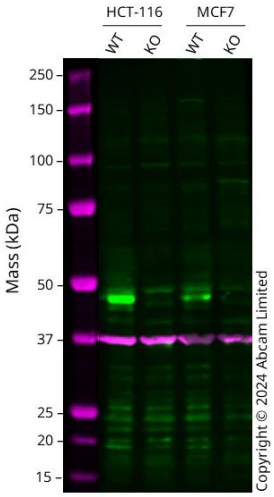
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab33911) (unpurified).

All lanes:
Western blot - Anti-Cyclin E1 antibody [EP435E] (ab33911) at 1/1000 dilution

Lane 1:
Wild-type HAP1 whole cell lysate at 40 µg

Lane 2:
CCNE1 (Cyclin E1) knockout HAP1 whole cell lysate at 40 µg

Predicted band size: 47 kDa



Western blot - Anti-Cyclin E1 antibody [EP435E] - BSA and Azide free (ab208696)

Cyclin E1 Western blot staining using rabbit Anti-Cyclin E1 antibody

This data was developed using the same antibody clone in a different buffer formulation (ab33911).

Western blot: Anti-CCNE1 antibody [EPR26497-64] (ab33911) 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, ab33911 was shown to bind specifically to CCNE1. A band was observed at 45 kDa in wild-type HCT 116 cell lysates with no signal observed at this size in CCNE1 knockout cell line. To generate this image, wild-type and CCNE1 knockout HCT 116 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.

All lanes:
Western blot - Anti-Cyclin E1 antibody [EP435E] (ab33911) at 1/1000 dilution

Lane 1:
Wild-type HCT 116 cell lysate at 20 µg

Lane 2:
CCNE1 knockout HCT 116 cell lysate at 20 µg

Lane 3:
Wild-type MCF7 ab288560 cell lysate at 20 µg

Lane 4:
CCNE1 knockout MCF7 ab286303 cell lysate at 20 µg

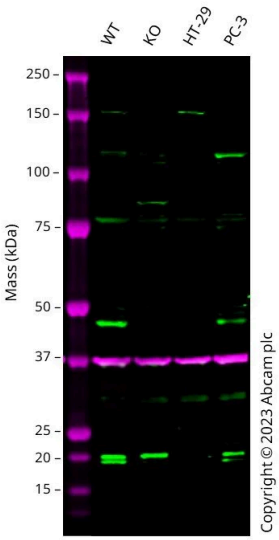
Secondary

All lanes:
Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution

Performed under reducing conditions.

Predicted band size: 47 kDa

Observed band size: 45 kDa



Western blot - Anti-Cyclin E1 antibody [EP435E] - BSA and Azide free (ab208696)

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab33911).
All lanes:
Western blot - Anti-Cyclin E1 antibody [EP435E] (ab33911) at 1/1000 dilution

Lane 1:
Wild-type MCF7 cell lysate at 20 µg

Lane 2:
CCNE1 knockout MCF7 cell lysate at 20 µg

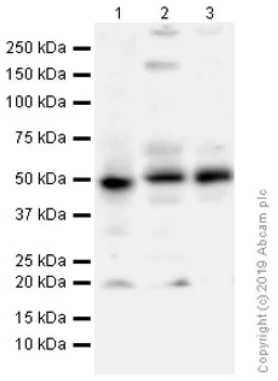
Lane 3:
HT-29 cell lysate at 20 µg

Lane 4:
PC-3 cell lysate at 20 µg

Developed using the ECL technique.

Performed under reducing conditions.

Observed band size: 47 kDa



Western blot - Anti-Cyclin E1 antibody [EP435E] - BSA and Azide free (ab208696)

Cyclin E1 is highly expressed in testis and placenta which is described in PMID: 9840943.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab33911).

All lanes:
Western blot - Anti-Cyclin E1 antibody [EP435E] (ab33911) at 1/1000 dilution

Lane 1:
HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates at 20 µg

Lane 2:
Human testis lysates at 20 µg

Lane 3:
Human placenta lysates at 20 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Predicted band size: 47 kDa

Observed band size: 50 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.