abcam

Product datasheet

Anti-Cyclin D1 antibody [EPR2241] - BSA and Azide free ab156448

リコンビナント RabMAb

7 Abreviews 画像数 11

製品の概要

製品名	Anti-Cyclin D1 antibody [EPR2241] - BSA and Azide free
製品の詳細	Rabbit monoclonal [EPR2241] to Cyclin D1 - BSA and Azide free
由来種	Rabbit
特異性	The immunogen used for this product shares 66% homology with CCND2 (seven amino acid stretch with 100% homology). Based on internal testing in WB, this product shows a weak cross-reactivity to Cyclin D2. For IHC usage, this product shows a tissue localization specific to Cyclin D1 with no cross-reactivity to Cyclin D2.
アプリケーション	**適用あり:** ICC/IF, IHC-P, IP, WB **適用なし:** Flow Cyt
種交差性	**交差種:** Mouse, Rat, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	Human mantle cell lymphoma tissue; MCF7 cell lysate.
特記事項	ab156448 is the carrier-free version of **ab134175**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. 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. 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. 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 production

For more information **see here**.

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

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C. Do Not Freeze.
バッファー	Constituent: 99% PBS
キャリア・フリー	はい
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR2241
アイソタイプ	IgG

アプリケーション

The Abpromise guarantee **Abpromise保証は、** 次のテスト済みアプリケーションにおけるab156448の使用に適用されます

アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
ICC/IF	★★★★★ (1)	Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
IP		Use at an assay dependent concentration.
WB	★★★★☆ (5)	Use at an assay dependent concentration. Predicted molecular weight: 34 kDa.

追加情報 Is unsuitable for Flow Cyt.

ターゲット情報

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

関連疾患 Note=A chromosomal aberration involving CCND1 may be a cause of B-lymphocytic malignancy, particularly mantle-cell lymphoma (MCL). Translocation t(11;14)(q13;q32) with immunoglobulin gene regions. Activation of CCND1 may be oncogenic by directly altering progression through the cell cycle.
Note=A chromosomal aberration involving CCND1 may be a cause of parathyroid adenomas. Translocation t(11;11)(q13;p15) with the parathyroid hormone (PTH) enhancer.
Defects in CCND1 are a cause of multiple myeloma (MM) [MIM:254500]. MM is a malignant

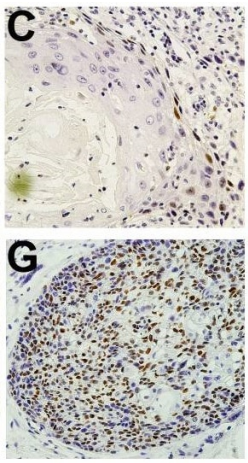
tumor of plasma cells usually arising in the bone marrow and characterized by diffuse involvement of the skeletal system, hyperglobulinemia, Bence-Jones proteinuria and anemia. Complications of multiple myeloma are bone pain, hypercalcemia, renal failure and spinal cord compression. The aberrant antibodies that are produced lead to impaired humoral immunity and patients have a high prevalence of infection. Amyloidosis may develop in some patients. Multiple myeloma is part of a spectrum of diseases ranging from monoclonal gammopathy of unknown significance (MGUS) to plasma cell leukemia. Note=A chromosomal aberration involving CCND1 is found in multiple myeloma. Translocation t(11;14)(q13;q32) with the IgH locus.

配列類似性 Belongs to the cyclin family. Cyclin D subfamily.

翻訳後修飾 Phosphorylation at Thr-286 by MAP kinases is required for ubiquitination and degradation following DNA damage. It probably plays an essential role for recognition by the FBXO31 component of SCF (SKP1-cullin-F-box) protein ligase complex.
Ubiquitinated, primarily as 'Lys-48'-linked polyubiquitination. Ubiquitinated by a SCF (SKP1-CUL1-F-box protein) ubiquitin-protein ligase complex containing FBXO4 and CRYAB (By similarity). Following DNA damage it is ubiquitinated by some SCF (SKP1-cullin-F-box) protein ligase complex containing FBXO31. Ubiquitination leads to its degradation and G1 arrest. Deubiquitinated by USP2; leading to stabilize it.

細胞内局在 Nucleus.

画像



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cyclin D1 antibody [EPR2241] - BSA and Azide free (ab156448)

Feng et al. PLoS One. 2011;6(10):e26399. doi: 10.1371/journal.pone.0026399. Epub 2011 Oct 31. Fig 1.

Immunohistochemistry was performed on human head and neck squamous cell carcinoma tissue using a rabbit monoclonal antibody against the CCND1 protein **ab134175** on 3-µm slides using 224 paraffin sections via the standard SP method.

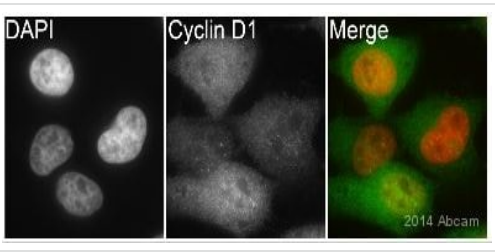
Panel C: An example of low Cyclin D1 expression.

Panel G: An example of high Cyclin D1 expression.

For full image please see paper.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab134175**).

Heat mediated antigen retrieval was performed with citrate buffer pH 6 before commencing with IHC staining protocol.

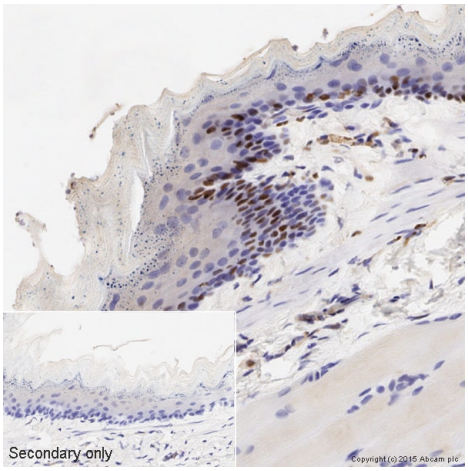


Immunocytochemistry/ Immunofluorescence - Anti-Cyclin D1 antibody [EPR2241] - BSA and Azide free (ab156448)

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

Immunocytochemical analysis of HeLa (Human epithelial cell line from cervix adenocarcinoma) cells, labeling Cyclin D1 with **ab134175** at a dilution of 1/200. Cells were paraformaldehyde fixed and permeabilized with 0.5% Triton X-100 in PBS. Incubation with the primary antibody was for 1 hour at 22°C. Cells were counterstained with DAPI following immunostaining.

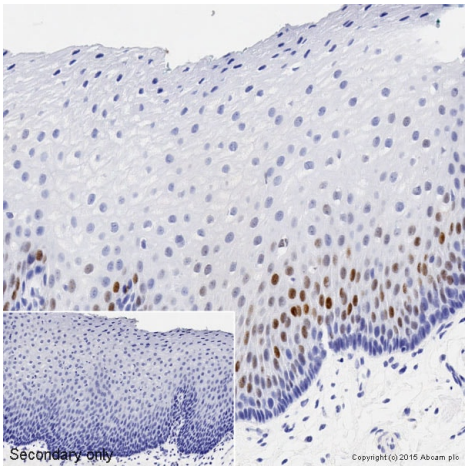
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab134175**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cyclin D1 antibody [EPR2241] - BSA and Azide free (ab156448)

IHC image of **ab134175** staining Cyclin D1 in rat esophagus formalin fixed paraffin embedded tissue sections, performed on a Leica Bond. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with **ab134175**, 5µg/ml working concentration, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with hematoxylin and mounted with DPX. No primary antibody was used in the secondary only control (shown on the inset).
For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab134175**).



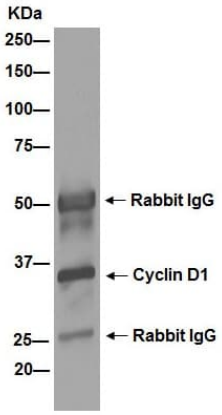
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cyclin D1 antibody [EPR2241] - BSA and Azide free (ab156448)

IHC image of **ab134175** staining Cyclin D1 in human esophagus formalin fixed paraffin embedded tissue sections*, performed on a Leica Bond. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with **ab134175**, 5µg/ml working concentration, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with hematoxylin and mounted with DPX. No primary antibody was used in the secondary only control (shown on the inset).

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab134175**).

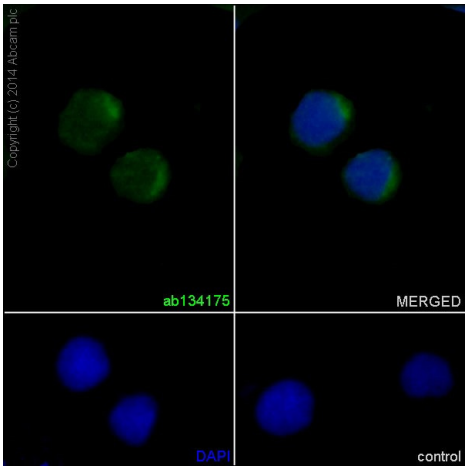


Immunoprecipitation - Anti-Cyclin D1 antibody [EPR2241] - BSA and Azide free (ab156448)

ab134175 (purified) at 1/30 immunoprecipitating cyclin D1 in A431 (Human epidermoid carcinoma cell line) cells. For western blotting, an HRP-conjugated goat anti-rabbit IgG, was used as the secondary antibody (1/1000).

Blocking/Dilution buffer and concentration: 5% NFDM/TBST.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab134175**).

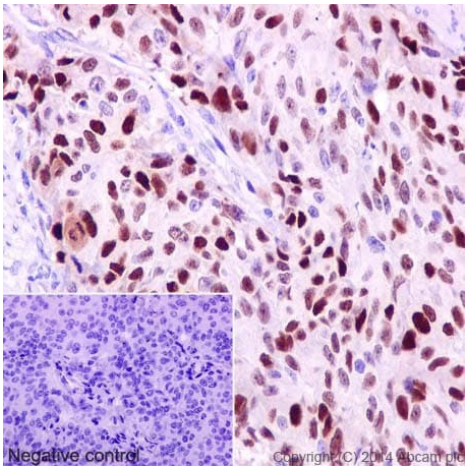


Immunocytochemistry/ Immunofluorescence - Anti-Cyclin D1 antibody [EPR2241] - BSA and Azide free (ab156448)

Immunofluorescent staining of Ramos (Human Burkitt's lymphoma cell line) cells (fixed in 4% PFA, permeabilized with 0.1% Triton X 100) using purified **ab134175** at a dilution of 1/50. An Alexa Fluor® 488 goat anti-rabbit antibody was used as the secondary at a dilution of 1/500 and the cells were counterstained with DAPI.

The negative control is shown in the bottom right hand panel - for the negative control, Alex Fluor® 594 goat anti-mouse was used at a dilution of 1/500.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab134175**).

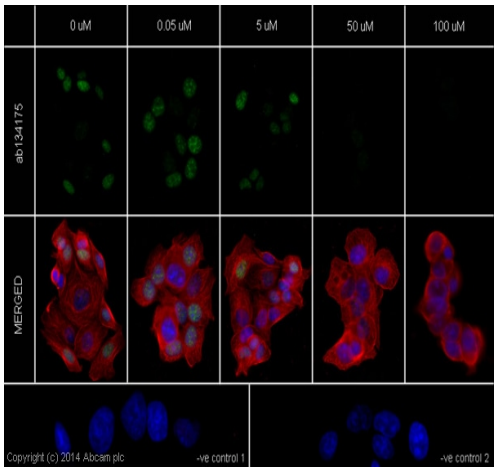


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cyclin D1 antibody [EPR2241] - BSA and Azide free (ab156448)

Immunohistochemical staining of paraffin embedded human endometrial adenocarcinoma with purified **ab134175** at a dilution of 1/100. An HRP goat anti-rabbit (**ab97051**) was used as the secondary antibody at a dilution of 1/500 and the sample was counterstained with hematoxylin. Antigen retrieval was perfomed using Tris-EDTA buffer, pH 9.0.

PBS was used instead of the primary antibody as the negative control (inset).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab134175**).



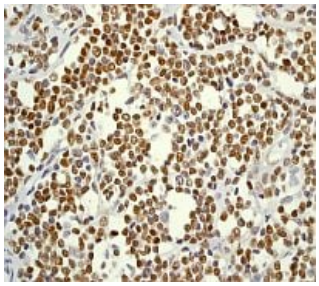
Immunocytochemistry/ Immunofluorescence - Anti-Cyclin D1 antibody [EPR2241] - BSA and Azide free (ab156448)

Unpurified **ab134175** staining Cyclin D1 in MCF7 (Human breast adenocarcinoma cell line) cells treated with KN-93 (**ab120980**).

The cells were fixed with 100% methanol (5min) and then blocked in 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated with **ab134175** at 10µg/ml and **ab7291** at 1µg/ml overnight at +4°C, followed by a further incubation at room temperature for 1h with an Goat **anti-Rabbit Alexa 488** secondary (**ab150081**) at 2 µg/ml (shown in green) and Goat **anti-Mouse Alexa 594** secondary (**ab150120**) at 2 µg/ml (shown in pseudo color red). Nuclear DNA was labeled in blue with DAPI.

Negative controls: 1– Rabbit primary and anti-mouse secondary antibody; 2 – Mouse primary antibody and anti-rabbit secondary antibody. Controls 1 and 2 indicate that there is no unspecific reaction between primary and secondary antibodies used.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab134175**).

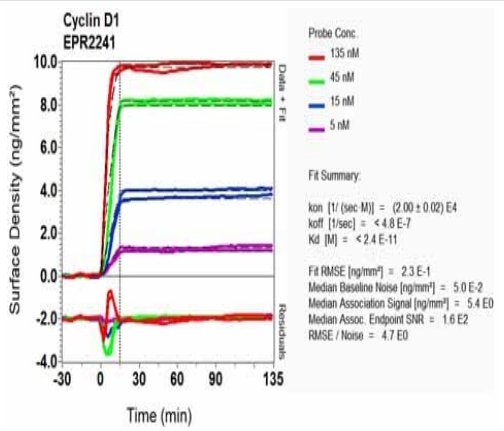


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cyclin D1 antibody [EPR2241] - BSA and Azide free (ab156448)

Immunohistochemical analysis of paraffin-embedded human mantle cell lymphoma tissue, labeling Cyclin D1 with unpurified **ab134175** at 1/100 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab134175**).

Heat mediated antigen retrieval was performed with citrate buffer pH 6 before commencing with IHC staining protocol.



OI-RD Scanning - Anti-Cyclin D1 antibody [EPR2241] - BSA and Azide free (ab156448)

Equilibrium disassociation constant (K_D)

Learn more about K_D

Click here to learn more about K_D

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab134175**).

Anti-Cyclin D1 antibody [EPR2241] - BSA and Azide free (ab156448)

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.co.jp/abpromise** or contact our technical team.

Terms and conditions

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