abcam

Product datasheet

HRP Anti-Cyclin D1 antibody [EPR2241] ab190564

Recombinant RabMAb

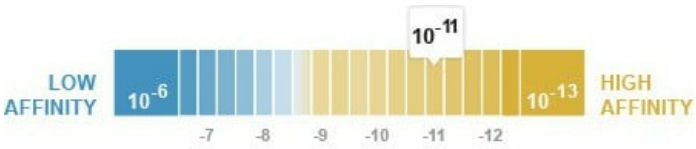
4 References 4 Images

Overview

Product name	HRP Anti-Cyclin D1 antibody [EPR2241]
Description	HRP Rabbit monoclonal [EPR2241] to Cyclin D1
Host species	Rabbit
Conjugation	HRP
Tested applications	**Suitable for:** WB
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: MCF7, RAW264.7 and PC12 whole cell lysates.
General notes	Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

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. Avoid freeze / thaw cycle. Store In the Dark.
Dissociation constant (K_D)	$K_D = 2.40 \times 10^{-11}$ M



Learn more about K_D

Storage buffer	pH: 7.40 Preservative: 0.1% Proclin 300 Solution Constituents: 30% Glycerol (glycerin, glycerine), 1% BSA, PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR2241

Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab190564 in the following tested applications.

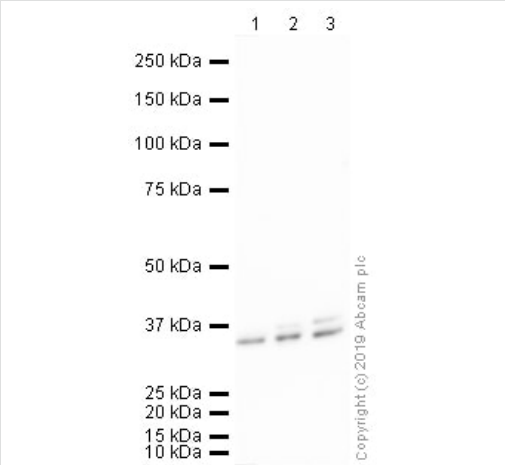
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/5000. Detects a band of approximately 34 kDa (predicted molecular weight: 34 kDa).

Target

Function	Essential for the control of the cell cycle at the G1/S (start) transition.
Involvement in disease	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.
Sequence similarities	Belongs to the cyclin family. Cyclin D subfamily.
Post-translational modifications	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.
Cellular localization	Nucleus.

Images



Western blot - HRP Anti-Cyclin D1 antibody [EPR2241] (ab190564)

All lanes : HRP Anti-Cyclin D1 antibody [EPR2241] (ab190564) at 1/5000 dilution

Lane 1 : MCF7 Whole Cell Lysate
Lane 2 : RAW 264.7 Whole Cell Lysate
Lane 3 : PC12 Whole cell Lysate

Lysates/proteins at 10 µg per lane.

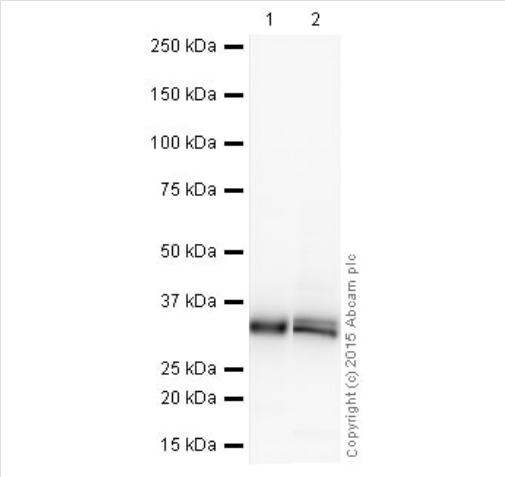
Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 34 kDa
Observed band size: 34 kDa

Exposure time: 4 minutes

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 3% milk blocking buffer before being incubated with ab190564 overnight at 4°C. Antibody binding was visualised using ECL development solution **ab133406**.



Western blot - HRP Anti-Cyclin D1 antibody [EPR2241] (ab190564)

All lanes : HRP Anti-Cyclin D1 antibody [EPR2241] (ab190564) at 1/5000 dilution

Lane 1 : MCF7 (Human breast adenocarcinoma cell line) Whole Cell Lysate
Lane 2 : RAW 264.7 (Mouse leukaemic monocyte macrophage cell line) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

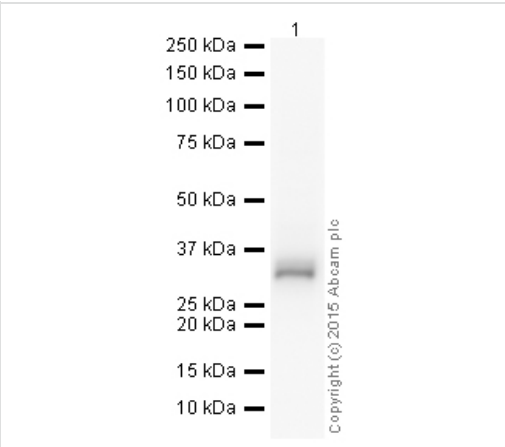
Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 34 kDa
Observed band size: 34 kDa

Exposure time: 1 minute

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 2% Bovine Serum Albumin before being incubated with ab190564 overnight at 4°C. Antibody binding was visualised using ECL development solution **ab133406**.



Western blot - HRP Anti-Cyclin D1 antibody [EPR2241] (ab190564)

HRP Anti-Cyclin D1 antibody [EPR2241] (ab190564) at 1/5000 dilution + PC12 (Rat adrenal pheochromocytoma cell line) Whole Cell Lysate at 10 µg

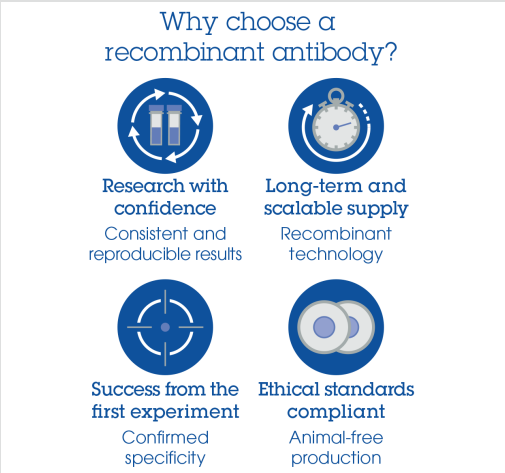
Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 34 kDa
Observed band size: 34 kDa

Exposure time: 1 minute

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 2% Bovine Serum Albumin before being incubated with ab190564 overnight at 4°C. Antibody binding was visualised using ECL development solution **ab133406**.



HRP Anti-Cyclin D1 antibody [EPR2241] (ab190564)

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