

Product datasheet

Anti-Cyclin D3/CCND3 antibody ab112034

3 References 2 Images

Overview

Product name	Anti-Cyclin D3/CCND3 antibody
Description	Rabbit polyclonal to Cyclin D3/CCND3
Host species	Rabbit
Specificity	The immunogen used for this product shares 69% homology with Cyclin D2. Cross-reactivity with this protein has not been confirmed experimentally.
Tested applications	Suitable for: WB, ICC/IF
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat, Sheep, Rabbit, Horse, Cow, Dog, Pig, Chimpanzee, Baboon, Macaque monkey, Gorilla, Chinese hamster, Orangutan 
Immunogen	Synthetic peptide corresponding to Human Cyclin D3/CCND3 aa 250 to the C-terminus (C terminal) conjugated to keyhole limpet haemocyanin. (Peptide available as ab138527)
Positive control	WB: Saos-2 whole cell lysates. ICC/IF: formaldehyde fixed WERI cells.
General notes	This product was previously labelled as Cyclin D3

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

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.

In preparation for this, we have started to update the applications & species that this product is 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. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab112034** 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		Use a concentration of 1 µg/ml. Detects a band of approximately 33 kDa (predicted molecular weight: 33 kDa). Abcam recommends using milk as the blocking agent (1%)
ICC/IF		Use a concentration of 5 µg/ml.

Target

Function	Regulatory component of the cyclin D3-CDK4 (DC) complex that phosphorylates and inhibits members of the retinoblastoma (RB) protein family including RB1 and regulates the cell-cycle during G(1)/S transition. Phosphorylation of RB1 allows dissociation of the transcription factor E2F from the RB/E2F complex and the subsequent transcription of E2F target genes which are responsible for the progression through the G(1) phase. Hypophosphorylates RB1 in early G(1) phase. Cyclin D-CDK4 complexes are major integrators of various mitogenic and antimitogenic signals. Also substrate for SMAD3, phosphorylating SMAD3 in a cell-cycle-dependent manner and repressing its transcriptional activity. Component of the ternary complex, cyclin D3/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex.
Sequence similarities	Belongs to the cyclin family. Cyclin D subfamily. Contains 1 cyclin N-terminal domain.
Cellular localization	Nucleus. Cytoplasm. Membrane. Cyclin D-CDK4 complexes accumulate at the nuclear

membrane and are then translocated to the nucleus through interaction with KIP/CIP family members.

Images



Western blot - Anti-Cyclin D3/CCND3 antibody (ab112034)

Anti-Cyclin D3/CCND3 antibody (ab112034) at 1 µg/ml (Milk Blocking - 1%) + Saos 2 (Human epithelial-like osteosarcoma cell line) Whole Cell Lysate at 25 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (ab97080) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

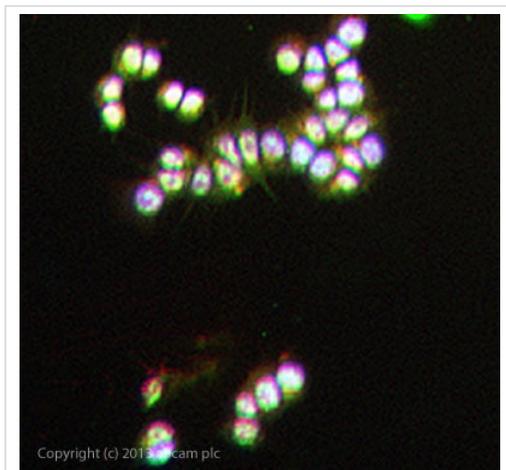
Predicted band size: 33 kDa

Observed band size: 33 kDa

Additional bands at: 56 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 16 minutes

Abcam recommends using milk as the blocking agent. Abcam welcomes customer feedback and would appreciate any comments regarding this product and the data presented above.



Immunocytochemistry/ Immunofluorescence - Anti-Cyclin D3/CCND3 antibody (ab112034)

ICC/IF image of ab112034 stained WERI cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody ab112034 at 5µg/ml overnight at +4°C. The secondary antibody (green) was a goat anti-rabbit DyLight® 488 (ab96899) IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

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

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