


Product datasheet

Anti-Cyclin D3/CCND3 antibody [SP207] ab183338

KO VALIDATED Recombinant RabMAb

★★★★★ [1 Abreviews](#) [5 References](#) [15 Images](#)

Overview

Product name	Anti-Cyclin D3/CCND3 antibody [SP207]
Description	Rabbit monoclonal [SP207] to Cyclin D3/CCND3
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), IHC-P, WB
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat, Cow 
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	IHC-P: Human tonsil, skin, uterus, placenta, cervix, pancreas, kidney, reactive lymph node, cervical squamous cell carcinoma, and B-cell lymphoma tissue; WB: Wild type HAP1 whole cell lysate; Flow Cyt (Intra): K562 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>This product is FOR RESEARCH USE ONLY. For commercial use, please contact partnerships@abcam.com.</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	<p>pH: 7.60</p> <p>Preservative: 0.1% Sodium azide</p> <p>Constituents: PBS, 1% BSA</p>
Purity	Protein A/G purified
Purification notes	Purified from TCS by protein A/G.

Clonality	Monoclonal
Clone number	SP207
Isotype	IgG

Applications

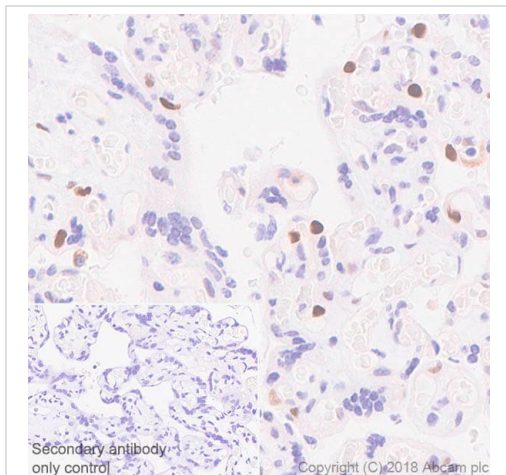
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab183338 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/100. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
IHC-P		1/100. Boil tissue section in EDTA buffer, pH 8.0 for 10 min followed by cooling at room temperature for 20 min.
WB		1/100. Predicted molecular weight: 33 kDa.

Target

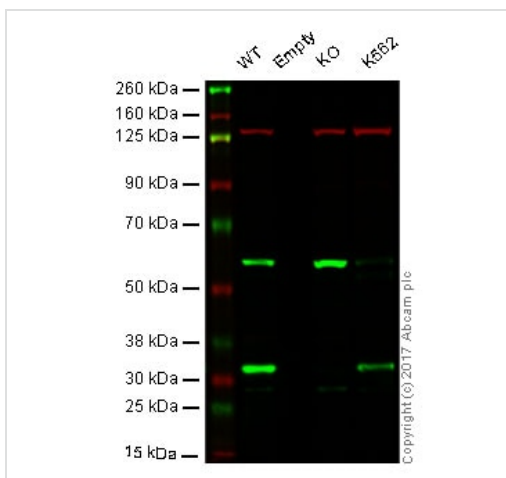
Function	Regulatory component of the cyclin D3-CDK4 (DC) complex that phosphorylates and inhibits members of the retinoblastoma (RB) protein family including RB1 and regulates the cell-cycle during G(1)/S transition. Phosphorylation of RB1 allows dissociation of the transcription factor E2F from the 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



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cyclin D3/CCND3 antibody [SP207] (ab183338)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human placenta tissue sections labeling Cyclin D3/CCND3 with ab183338 at 1/100 dilution (3.35 µg/ml). Heat mediated antigen retrieval was performed Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins. Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Western blot - Anti-Cyclin D3/CCND3 antibody [SP207] (ab183338)

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

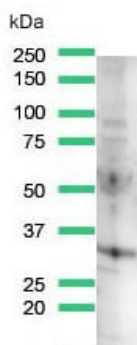
Lane 2: Empty Lane

Lane 3: CCND3 knockout HAP1 whole cell lysate (20 µg)

Lane 4: K562 whole cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab183338 observed at 33 kDa. Red - loading control, [ab18058](#), observed at 130 kDa.

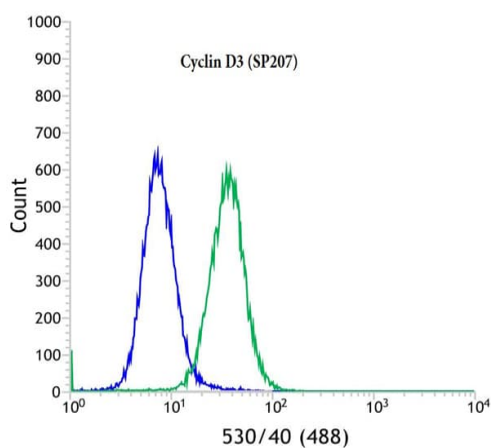
ab183338 was shown to recognize empty when empty knockout samples were used, along with additional cross-reactive bands. Wild-type and empty knockout samples were subjected to SDS-PAGE. Ab183338 and Mouse anti Vinculin loading control were incubated overnight at 4°C at 100 dilution and 1/10000 dilution 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 1/10000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-Cyclin D3/CCND3 antibody [SP207] (ab183338)

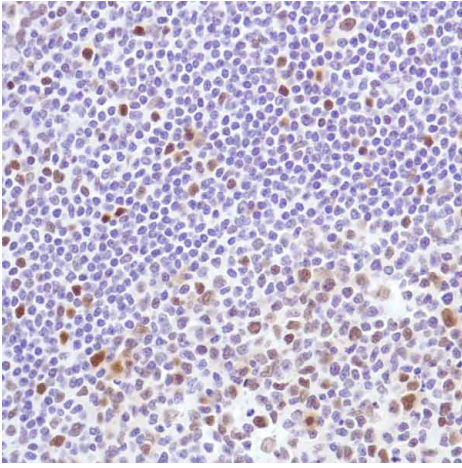
Anti-Cyclin D3/CCND3 antibody [SP207] (ab183338) at 1/100 dilution + K562 (Human chronic myelogenous leukemia cell line from bone marrow) cell lysate

Predicted band size: 33 kDa



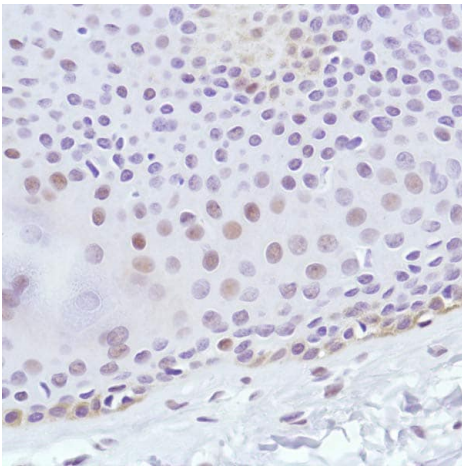
Flow Cytometry (Intracellular) - Anti-Cyclin D3/CCND3 antibody [SP207] (ab183338)

Flow cytometric analysis of K562 (Human chronic myelogenous leukemia cell line from bone marrow) cells, labeling Cyclin D3/CCND3 with ab183338 diluted 1/100 (green), compared with a negative control of anti-rabbit IgG (blue).



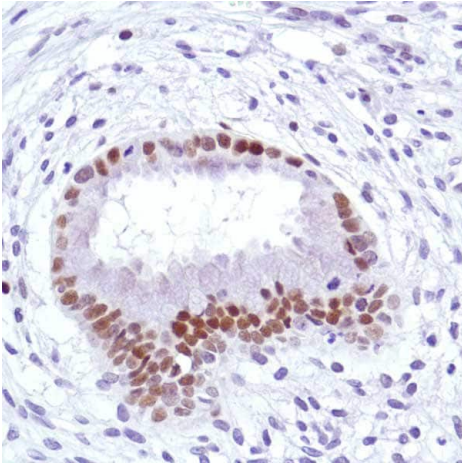
Immunohistochemical analysis of paraffin-embedded human tonsil tissue, labeling Cyclin D3/CCND3 with ab183338 at 1/100 dilution.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cyclin D3/CCND3 antibody [SP207] (ab183338)



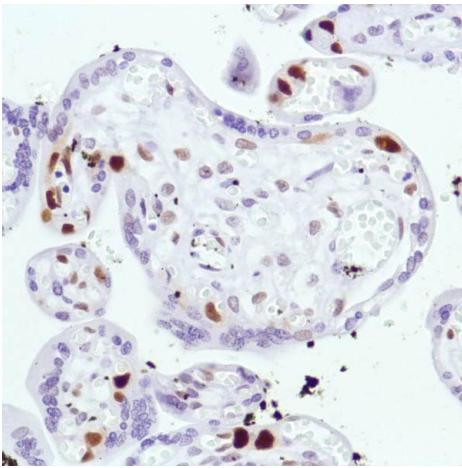
Immunohistochemical analysis of paraffin-embedded human skin tissue, labeling Cyclin D3/CCND3 with ab183338 at 1/100 dilution.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cyclin D3/CCND3 antibody [SP207] (ab183338)



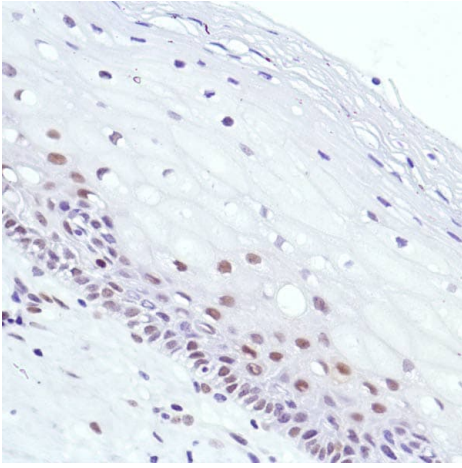
Immunohistochemical analysis of paraffin-embedded human uterus tissue, labeling Cyclin D3/CCND3 with ab183338 at 1/100 dilution.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cyclin D3/CCND3 antibody [SP207] (ab183338)



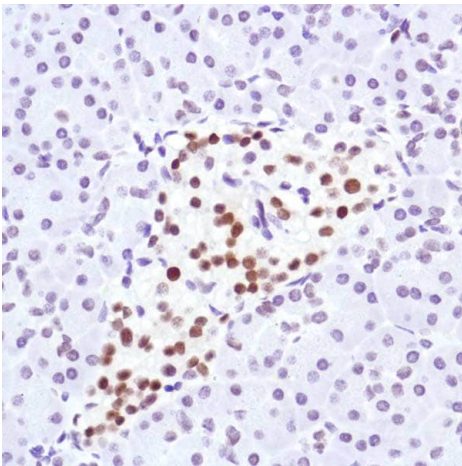
Immunohistochemical analysis of paraffin-embedded human placenta tissue, labeling Cyclin D3/CCND3 with ab183338 at 1/100 dilution.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cyclin D3/CCND3 antibody [SP207] (ab183338)



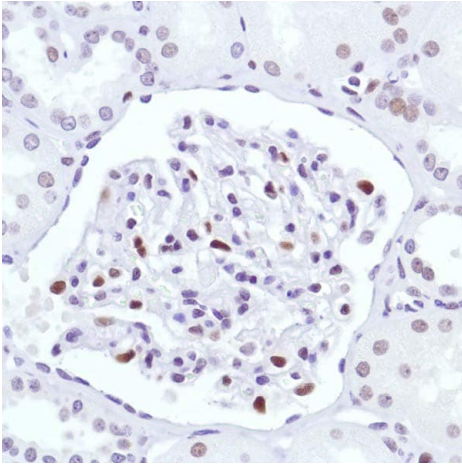
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cyclin D3/CCND3 antibody [SP207] (ab183338)

Immunohistochemical analysis of paraffin-embedded human cervix tissue, labeling Cyclin D3/CCND3 with ab183338 at 1/100 dilution.



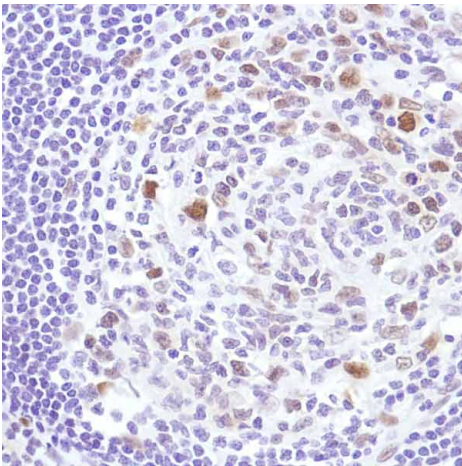
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cyclin D3/CCND3 antibody [SP207] (ab183338)

Immunohistochemical analysis of paraffin-embedded human pancreas tissue, labeling Cyclin D3/CCND3 with ab183338 at 1/100 dilution.



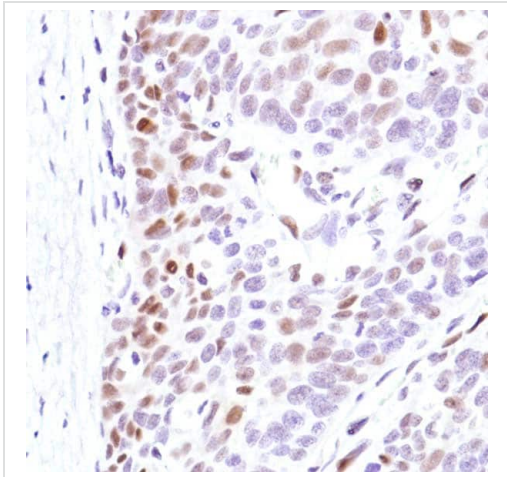
Immunohistochemical analysis of paraffin-embedded human kidney tissue, labeling Cyclin D3/CCND3 with ab183338 at 1/100 dilution.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cyclin D3/CCND3 antibody [SP207] (ab183338)



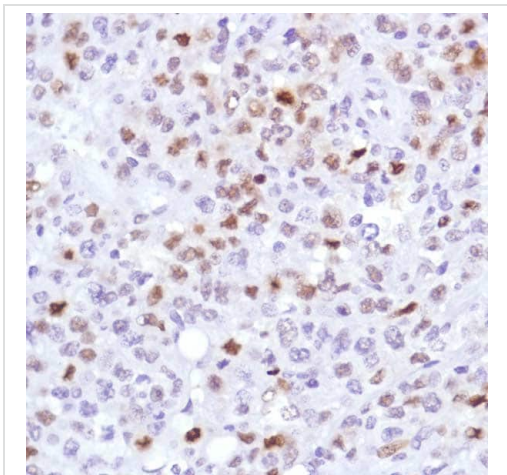
Immunohistochemical analysis of paraffin-embedded human reactive lymph node tissue, labeling Cyclin D3/CCND3 with ab183338 at 1/100 dilution.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cyclin D3/CCND3 antibody [SP207] (ab183338)



Immunohistochemical analysis of paraffin-embedded human cervical squamous cell carcinoma tissue, labeling Cyclin D3/CCND3 with ab183338 at 1/100 dilution.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cyclin D3/CCND3 antibody [SP207] (ab183338)



Immunohistochemical analysis of paraffin-embedded human B-cell lymphoma tissue, labeling Cyclin D3/CCND3 with ab183338 at 1/100 dilution.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cyclin D3/CCND3 antibody [SP207] (ab183338)

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 D3/CCND3 antibody [SP207] (ab183338)

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

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.com/abpromise> or contact our technical team.

Terms and conditions

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