# abcam

# Product datasheet

# Anti-Cyclin B2/CCNB2 antibody [R17985] - BSA and Azide free ab250841



# 10 Images

### Overview

**Product name** Anti-Cyclin B2/CCNB2 antibody [R17985] - BSA and Azide free

**Description** Rabbit monoclonal [R17985] to Cyclin B2/CCNB2 - BSA and Azide free

**Host species** Rabbit

**Tested applications** Suitable for: IP, ICC/IF, WB, IHC-P Species reactivity Reacts with: Mouse, Rat, Human

**Immunogen** Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

**General notes** ab250841 is the carrier-free version of ab185622.

> 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 cellbased 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<sup>®</sup> 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.

**Properties** 

Form Liquid

**Storage instructions** Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

**Purity** Protein A purified

**Clonality** Monoclonal

Clone number R17985

**Isotype** IgG

### **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab250841 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
IP		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 45 kDa (predicted molecular weight: 45 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.  Recommended for human and rat but not mouse.

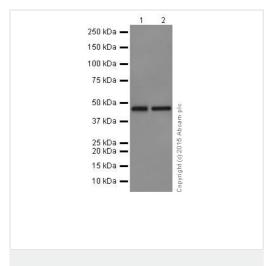
# **Target**

**Function** Essential for the control of the cell cycle at the G2/M (mitosis) transition.

**Sequence similarities**Belongs to the cyclin family. Cyclin AB subfamily.

**Developmental stage** Accumulates steadily during G2 and is abruptly destroyed at mitosis.

# **Images**



Western blot - Anti-Cyclin B2/CCNB2 antibody [R17985] - BSA and Azide free (ab250841) **All lanes**: Anti-Cyclin B2/CCNB2 antibody [R17985] (ab185622) at 1/1000 dilution

Lane 1 : SW480 (Human colon adenocarcinoma cell line) whole cell lysate

**Lane 2 :** HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell lysate

Lysates/proteins at 20 µg per lane.

# Secondary

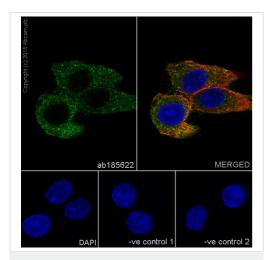
**All lanes :** Anti-Rabbit  $\lg G$  (HRP), specific to the non-reduced form of  $\lg G$  at 1/1000 dilution

**Predicted band size:** 45 kDa **Observed band size:** 45 kDa

Exposure time: 3 minutes

This data was developed using <u>ab185622</u>, the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDM/TBST.



Immunocytochemistry/ Immunofluorescence - Anti-Cyclin B2/CCNB2 antibody [R17985] - BSA and Azide free (ab250841)

ab185622 MERGED

DAPI -ve control 1 -ve control 2

Immunocytochemistry/ Immunofluorescence - Anti-Cyclin B2/CCNB2 antibody [R17985] - BSA and Azide free (ab250841)

This data was developed using <u>ab185622</u>, the same antibody clone in a different buffer formulation.

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized PC-12 (Rat adrenal gland pheochromocytoma) cells labeling Cyclin B2/CCNB2 with ab185622 at 1/500 dilution, followed by Goat anti-rabbit lgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/500 dilution (green). Confocal image showing cytoplasmic staining on PC-12 cell line. The nuclear counter stain is DAPI (blue). Tubulin is detected with ab7291 (anti-Tubulin mouse mAb) at 1/1000 dilution and ab150120 (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution (red).

The negative controls are as follows;

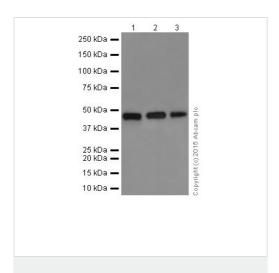
-ve control 1: <u>ab185622</u> at 1/500 dilution followed by <u>ab150120</u> (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution.
-ve control 2: <u>ab7291</u> (anti-Tubulin mouse mAb) at 1/1000 dilution followed by <u>ab150077</u> (Alexa Fluor®488 Goat Anti-Rabbit lgG H&L) at 1/500 dilution.

This data was developed using <u>ab185622</u>, the same antibody clone in a different buffer formulation.

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized SW480 (Human colon adenocarcinoma cell line) cells labeling Cyclin B2/CCNB2 with <a href="mailto:ab185622">ab185622</a> at 1/500 dilution, followed by Goat anti-rabbit lgG (Alexa Fluor® 488) (<a href="mailto:ab150077">ab150077</a>) secondary antibody at 1/500 dilution (green). Confocal image showing cytoplasmic staining on SW480 cell line. The nuclear counter stain is DAPI (blue). Tubulin is detected with <a href="mailto:ab7291">ab7291</a> (anti-Tubulin mouse mAb) at 1/1000 dilution and <a href="mailto:ab150120">ab150120</a> (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution (red).

The negative controls are as follows;

-ve control 1: <u>ab185622</u> at 1/500 dilution followed by <u>ab150120</u> (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution.
-ve control 2: <u>ab7291</u> (anti-Tubulin mouse mAb) at 1/1000 dilution followed by <u>ab150077</u> (Alexa Fluor®488 Goat Anti-Rabbit lgG H&L) at 1/500 dilution.



Western blot - Anti-Cyclin B2/CCNB2 antibody [R17985] - BSA and Azide free (ab250841) **All lanes :** Anti-Cyclin B2/CCNB2 antibody [R17985] (**ab185622**) at 1/5000 dilution

Lane 1: A549 (Human lung carcinoma) whole cell lysate

Lane 3: Rat testis lysate

Lysates/proteins at 20 µg per lane.

### **Secondary**

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/1000 dilution

**Predicted band size:** 45 kDa **Observed band size:** 45 kDa

Exposure time: 3 minutes

This data was developed using <u>ab185622</u>, the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDM/TBST.

**All lanes :** Anti-Cyclin B2/CCNB2 antibody [R17985] (ab185622) at 1/1000 dilution

Lane 1: C6 (Rat glial tumor cells) whole cell lysate

Lane 2: PC-12 (Rat adrenal gland pheochromocytoma) whole cell lysate

Lysates/proteins at 20 µg per lane.

# 1 2 250 kDa — 150 kDa — 100 kDa — 75 kDa — 50 kDa — 37 kDa — 25 kDa — 20 kDa — 15 kDa — 15 kDa — 10 kDa —

Western blot - Anti-Cyclin B2/CCNB2 antibody [R17985] - BSA and Azide free (ab250841)

### **Secondary**

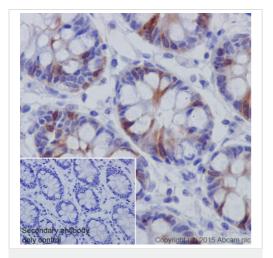
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/1000 dilution

Predicted band size: 45 kDa Observed band size: 45 kDa Exposure time: 30 seconds

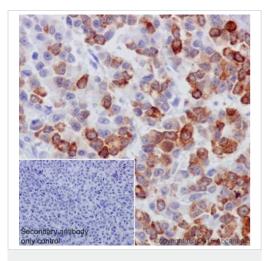
This data was developed using <u>ab185622</u>, the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDM/TBST.

This data was developed using <u>ab185622</u>, the same antibody clone in a different buffer formulation.Immunohistochemical analysis of paraffin-embedded Human colon tissue labeling Cyclin B2/CCNB2 with <u>ab185622</u> at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) secondary antibody at 1/500 dilution. Cytoplasmic staining on normal Human colon epithelium is observed. Counter stained with Hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/500 dilution. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

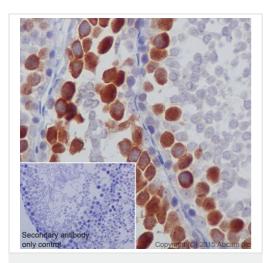


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cyclin B2/CCNB2 antibody [R17985] - BSA and Azide free (ab250841)



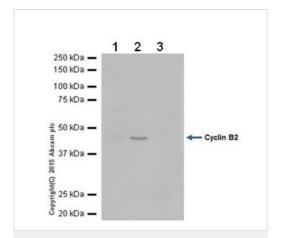
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cyclin B2/CCNB2 antibody [R17985] - BSA and Azide free (ab250841)

This data was developed using <a href="mailto:ab185622">ab185622</a>, the same antibody clone in a different buffer formulation. Immunohistochemical analysis of paraffin-embedded Human colon cancer tissue labeling Cyclin B2/CCNB2 with <a href="mailto:ab185622">ab185622</a> at 1/100 dilution, followed by Goat Anti-Rabbit lgG H&L (HRP) (<a href="mailto:ab97051">ab97051</a>) secondary antibody at 1/500 dilution. Cytoplasmic staining on tumor cells of Human colon epithelium is observed. Counter stained with Hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) (<a href="mailto:ab97051">ab97051</a>) at 1/500 dilution. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cyclin B2/CCNB2 antibody [R17985] - BSA and Azide free (ab250841)

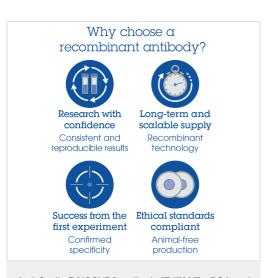
This data was developed using <u>ab185622</u>, the same antibody clone in a different buffer formulation.Immunohistochemical analysis of paraffin-embedded Rat testis tissue labeling Cyclin B2/CCNB2 with <u>ab185622</u> at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) secondary antibody at 1/500 dilution. Cytoplasmic staining on spermatocytes of rat testis is observed. Counter stained with Hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/500 dilution. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunoprecipitation - Anti-Cyclin B2/CCNB2 antibody [R17985] - BSA and Azide free (ab250841)

This data was developed using <u>ab185622</u>, the same antibody clone in a different buffer formulation. Cyclin B2/CCNB2 was immunoprecipitated from 1mg of HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell lysate with <u>ab185622</u> at 1/80 dilution. Western blot was performed from the immunoprecipitate using <u>ab185622</u> at 1/1000 dilution. Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG, was used as secondary antibody at 1/1500 dilution. Lane 1: HeLa whole cell lysate 10 µg (Input). Lane 2: <u>ab185622</u> IP in HeLa whole cell lysate. Lane 3: Rabbit monoclonal IgG (<u>ab172730</u>) instead of <u>ab185622</u> in HeLa whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST. Exposure time:10 seconds



Anti-Cyclin B2/CCNB2 antibody [R17985] - BSA and Azide free (ab250841)

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

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