

**Datasheet for 100-401-152****Cyclin B1 Antibody****Overview**

|                      |  |
|----------------------|--|
| <b>Description:</b>  | Anti-Cyclin B1 (RABBIT) Antibody - 100-401-152 |
| <b>Item No.:</b>     | 100-401-152                                    |
| <b>Size:</b>         | 100 µL   |
| <b>Applications:</b> | IHC, WB  |
| <b>Reactivity:</b>   | Human  |
| <b>Host Species:</b> | Rabbit   |

**Product Details**

|                      |  |
|----------------------|--|
| <b>Background:</b>   | The protein encoded by this gene is a regulatory protein involved in mitosis. The gene product forms a complex with p34 (cdc2) to form the maturation-promoting factor (MPF). Two alternative transcripts have been found, a constitutively expressed transcript and a cell cycle-regulated transcript that is expressed predominantly during G2/M phase. The different transcripts result from the use of alternate transcription initiation sites. |
| <b>Synonyms:</b>     | rabbit anti-cyclin B1 antibody, G2/mitotic-specific cyclin-B1  |
| <b>Host Species:</b> | Rabbit   |
| <b>Clonality:</b>    | Polyclonal   |
| <b>Format:</b>       | Antiserum  |

**Target Details**

|                        |   |
|------------------------|---|
| <b>Gene Name:</b>      | CCNB1   |
| <b>Reactivity:</b>     | Human   |
| <b>Immunogen Type:</b> | Native Protein  |
| <b>Immunogen:</b>      | Anti-Cyclin B1 antibody was produced by repeated immunizations of full length fusion protein corresponding to the human gene. |

**Purity/Specificity:** This product was prepared from monospecific antiserum by delipidation and defibrination. Antiserum will specifically react with a 55-62 kDa Cyclin B1 protein from human, rat and mouse tissue. No reaction was observed against other related cyclins. Cross reactivity with Cyclin B1 from other species may also occur.

**Relevant Links:**

- [UniProtKB - P14635](#)
- [NCBI - 14327896](#)
- [GeneID - 891](#)

## Application Details

**Tested Applications:** IHC, WB

**Application Note:** Anti-Cyclin B1 antibody has been tested by western blot and immunohistochemistry and is suitable for use in ELISA, immunoblotting, immunoprecipitation, immunohistochemistry, and other immunological methods requiring high titer and specificity. Specific conditions for reactivity and detection of Cyclin B1 should be optimized by the end user. Expect a band approximately 55-66 kDa in size corresponding to Cyclin B1 by western blotting in the appropriate cell lysate or extract. H23 cells may be used as a positive control.

**Assay Dilutions:** All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

**ELISA:** 1:2,000 - 1:10,000

**IHC:** 1:500

**IP:** 1:100

**WB:** 1:500 - 1:1,000

## Formulation

**Physical State:** Liquid (sterile filtered)

**Concentration:** 80 mg/mL by Refractometry

**Buffer:** None

**Preservative:** 0.01% (w/v) Sodium Azide

**Stabilizer:** None

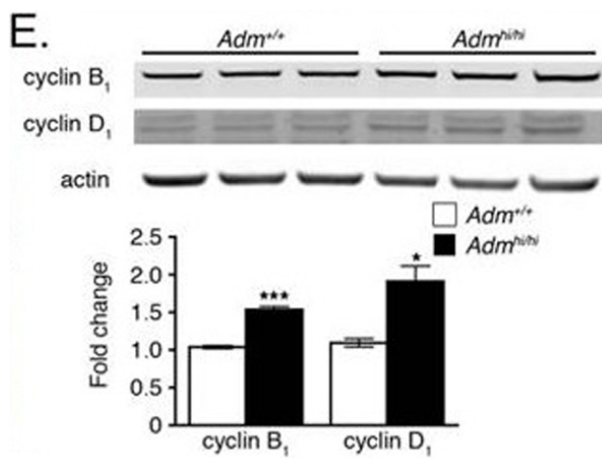
## Shipping & Handling

**Shipping Condition:** Dry Ice

**Storage Condition:** Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

**Expiration:** Expiration date is one (1) year from date of receipt.

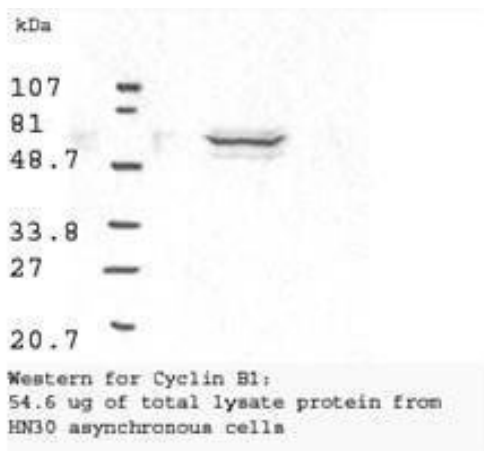
## Images



### Western Blot

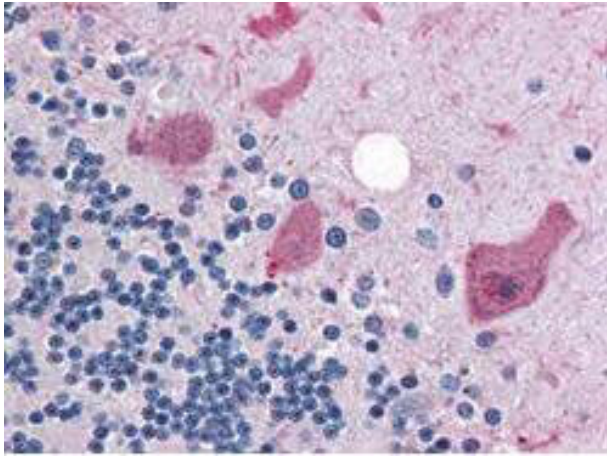
Enhanced proliferation of *Adm*<sup>hi/hi</sup> hearts during embryonic development.

E: Representative Western blot for cyclin B1 and cyclin D1 normalized to actin. Each lane on the blot is loaded with protein lysates from individual postnatal day 1 pups. Differences in lane loading were accounted for by normalizing each cyclin band to the corresponding actin band for each lane. These numbers were then normalized to a wild-type sample to compute the fold change. Fig 5. PMID: 24123312.



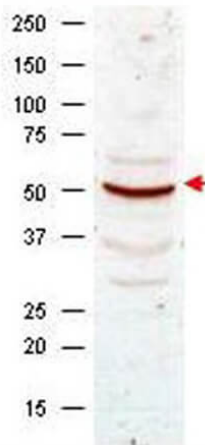
### Western Blot

Western blot analysis using Rockland's Anti-Cyclin B1 antibody shows detection of human Cyclin B1 present in asynchronous HN30 cell lysates. HN30 cells are from head and neck cancer tumors that over express cyclin B1 and D1. Comparison to a molecular weight marker indicates a band of ~62 kDa corresponding to the expected molecular weight for the protein. The blot was incubated with a 1:500 dilution of the antibody for 1 h at room temperature. Detection occurred using a 1:10,000 of HRP conjugated Goat-a-Rabbit IgG 611-103-122 and chemiluminescence reagent with a 1-min exposure time. Other detection systems will yield similar results. Personal communication, Luca Cote, Temple University, Philadelphia, PA.



### Immunohistochemistry

Rockland's anti-Cyclin B1 antibody was diluted 1:500 to detect Cyclin B1 in human brain cerebellum tissue. Tissue was formalin fixed and paraffin embedded. No pre-treatment of sample was required. The image shows the localization of antibody as the precipitated red signal, with a hematoxylin purple nuclear counter stain.



### Western Blot

Western blot analysis using Rockland's anti-Cyclin B1 antibody shows detection of Cyclin B1 present in asynchronous HeLa cell lysates. Comparison to a molecular weight marker indicates a band of ~55 kDa corresponding to human Cyclin B1 (arrowhead). Approximately 50 µg of lysate was loaded on to a 7% SDS-PAGE gel for separation. After transfer to nitrocellulose, the blot was incubated with a 1:500 dilution of the antibody for 1 h at room temperature. Detection occurred using a 1:10,000 of HRP conjugated Goat-a-Rabbit IgG (p/n 611-103-122). Personal communication, Luca D'Agostino, Temple University, Philadelphia, PA.

## References

- Wetzel-Strong, SE et al. Epicardial-derived adrenomedullin drives cardiac hyperplasia during embryogenesis. *Developmental Dynamics : An Official Publication of the American Association of Anatomists* (2014)

## Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.