

## ABfinity™ Rb [pT821] Recombinant Rabbit Monoclonal Antibody

Publication Number: MAN0007173

Rev. 1.00

Catalog Number: 701290

Store at 2°C to 8°C (short-term), or -20°C (long-term)

**Clonality:** Monoclonal  
**Concentration:** 0.5 mg/mL  
**Quantity:** 100 µg  
**Volume:** 200 µL

**Host/Class:** Rabbit IgG  
**Reactivity:** Human Rb [pT821]  
**Predicted Reactivity:** Human

### Product Description

Retinoblastoma (Rb) is a tumor-suppressor protein belonging to the pocket protein family. It is a nuclear protein which is widely expressed in retinal cells. Rb prevents the replication of damaged DNA by regulating progression along the cell cycle. It is inactivated by phosphorylation and activated by dephosphorylation. Phosphorylation of Rb at Thr<sup>821</sup> is catalyzed by cdk2/complexes such as cyclin E/cdk2, and cyclin A/cdk2, and results in disruption of the interaction of Rb with proteins containing the LXCXE binding motif.

### Product Specifications

**Immunogen:** Phosopeptide corresponding to amino acids 816–825 of human Rb [pT821]  
**Alternate Names:** p105-Rb  
**Apparent MW:** 110 kDa  
**Gene ID:** 5925  
**Protein Accession No.:** P06400  
**Sequence Identity:** Human  
**Sequence Homology:** Mouse, Rat, Monkey, Rabbit  
**Clone/PAD:** 16H2L1  
**Lot:** See product label

### Product Applications

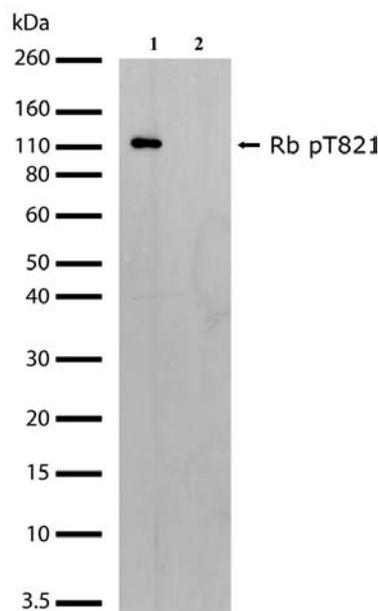
Application	Species	Test Material	Concentration
Western blotting	Human	COLO 205 cells	2–3 µg/mL
Immunocytochemistry	Human	HeLa cells	1 µg/mL
Indirect ELISA	Human	Phosopeptide	1.5 x 10 <sup>-4</sup> to 3 µg/mL

### Stability

When stored as instructed, expires one year from date of receipt unless otherwise indicated on product label.

### Storage and Handling

Store the antibody at 2°C to 8°C for up to 1 month, -20°C for long storage. Avoid repeated freezing and thawing.



**Figure 1** Western blot analysis of ABfinity™ Rb [pT821] Recombinant Rabbit Monoclonal Antibody (Cat. no. 701290).

Western blot analysis was performed on whole cell extracts from COLO 205 cells. Endogenous levels of phosphorylated Rb (pT 821) was detected at ~ 110 kDa using ABfinity™ Rb [pT821] Recombinant Rabbit Monoclonal Antibody at a concentration of 2 µg/mL. To confirm specificity, competition was performed by preincubation with phosphopeptide to inhibit antibody binding. The blot was developed using enhanced chemiluminescence (ECL) method.

### Storage Buffer

Phosphate buffered saline (PBS) with 0.09% sodium azide.

**Caution:** Sodium azide is extremely toxic and may react with lead and copper plumbing to form highly explosive metal azides. Properly dispose of solutions containing sodium azide. Read the Safety Data Sheets (SDSs) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves. SDSs are available at [www.lifetechnologies.com/support](http://www.lifetechnologies.com/support).

**For research use only. Not for use in diagnostic procedures.**

## Product Documentation

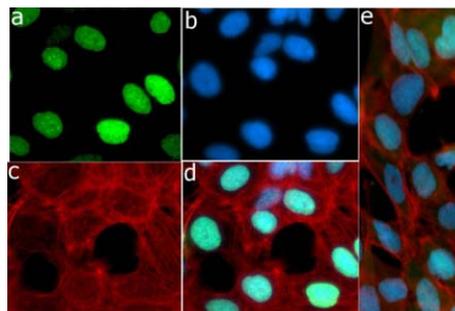
To obtain a Certificate of Analysis or SDS, visit [www.lifetechnologies.com/support](http://www.lifetechnologies.com/support).

## Related Products

Product Name	Quantity	Catalog No.
iBlot® Dry Blotting System	1 unit	IB1001
WesternBreeze® Chromogenic Kit Anti-Rabbit	1 kit	WB7105
WesternBreeze® Chemiluminescent Kit, Anti-Rabbit	1 kit	WB7106

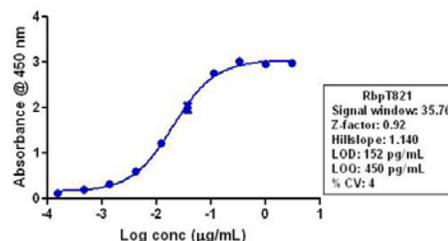
## Limited Product Warranty

Life Technologies Corporation and/or its affiliate(s) warrant their products as set forth in the Life Technologies' General Terms and Conditions of Sale found on Life Technologies' website at [www.lifetechnologies.com/termsandconditions](http://www.lifetechnologies.com/termsandconditions). If you have any questions, please contact Life Technologies at [www.lifetechnologies.com/support](http://www.lifetechnologies.com/support).



**Figure 2** Immunocytochemistry analysis of ABfinity™ Rb [pT821] Recombinant Rabbit Monoclonal Antibody (Cat. no. 701290).

Immunocytochemistry analysis of HeLa cells stained with ABfinity™ Rb [pT821] Recombinant Rabbit Monoclonal Antibody, using **a**: Alexa Fluor® 488 goat anti-rabbit as a secondary antibody (green). **b**: DAPI stained HeLa nuclei (blue). **c**: Actin stained with Alexa Fluor® 594 phalloidin (red). **d**: Composite image of cells showing nuclear localization of Rb [pT821]. **e**: Composite image of cells showing inhibition of antibody binding after competition with the phosphorylated phosphopeptide.



**Figure 3** Indirect ELISA of ABfinity™ Rb [pT821] Recombinant Rabbit Monoclonal Antibody (Cat. no. 701290).

Indirect ELISA was performed using various dilutions of ABfinity™ Rb [pT821] Recombinant Rabbit Monoclonal Antibody (Cat. no. 701290) to detect Rb [pT821] phosphopeptide coated onto the plate. A non-linear regression analysis was performed (4 PL), and LOD and LOQ for the antibody was determined.

## Explanation of symbols

Symbol	Description	Symbol	Description	Symbol	Description
	Manufacturer		Catalog number		Batch code
	Use by		Temperature limitation		
	Consult instructions for use		Caution, consult accompanying documents		

## Limited Use Label License No. 327: Recombinant Antibody Technology

Notice to Purchaser: The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product in research and manufacturing conducted by the buyer (whether the buyer is an academic or for-profit entity). The buyer cannot sell or otherwise transfer (a) this product, (b) its components or (c) materials made using this product or its components to a third party or otherwise use this product or its components or materials made using this product or its components for Commercial Purposes. The buyer may transfer information or materials made through the use of this product to a scientific collaborator, provided that such transfer is not for any Commercial Purpose, and that such collaborator agrees in writing (a) not to transfer such materials to any third party, and (b) to use such transferred materials and/or information solely for research and not for Commercial Purposes. Commercial Purposes means any activity by a party for consideration and may include, but is not limited to: (1) use of the product or its components for contract manufacturing services; (2) use of the product or its components to provide a service, information, or data; (3) use of the product itself or its components as a therapeutic, diagnostic or prophylactic; or (4) resale of the product or its components, whether or not such product or its components are resold for use in research or manufacturing. If the purchaser is not willing to accept the limitations of this limited use statement, Life Technologies is willing to accept return of the product for a full refund. For information on obtaining additional rights, please contact [outlicensing@lifetech.com](mailto:outlicensing@lifetech.com).

DISCLAIMER: LIFE TECHNOLOGIES AND/OR ITS AFFILIATE(S) DISCLAIM ALL WARRANTIES WITH RESPECT TO THIS DOCUMENT, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. TO THE EXTENT ALLOWED BY LAW, IN NO EVENT SHALL LIFE TECHNOLOGIES AND/OR ITS AFFILIATE(S) BE LIABLE, WHETHER IN CONTRACT, TORT, WARRANTY, OR UNDER ANY STATUTE OR ON ANY OTHER BASIS FOR SPECIAL, INCIDENTAL, INDIRECT, PUNITIVE, MULTIPLE OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH OR ARISING FROM THIS DOCUMENT, INCLUDING BUT NOT LIMITED TO THE USE THEREOF.

©2012 Life Technologies Corporation. All rights reserved. The trademarks mentioned herein are the property of Life Technologies Corporation or their respective owners.

For support visit [www.lifetechnologies.com/support](http://www.lifetechnologies.com/support) or email [techsupport@lifetech.com](mailto:techsupport@lifetech.com)

[www.lifetechnologies.com](http://www.lifetechnologies.com)

15 September 2012

