

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

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Catalog Number: 710314

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

<b>Clonality:</b>	Oligoclonal	<b>Host/Class:</b>	Rabbit IgG
<b>Concentration:</b>	0.5 mg/mL	<b>Reactivity:</b>	Human Rb [pT821]
<b>Quantity:</b>	100 µg	<b>Predicted Reactivity:</b>	Human
<b>Volume:</b>	200 µL		

### Product Description

Retinoblastoma (Rb) is a tumor-suppressor protein from 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 threonine 821 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 motif.

### Product Specifications

<b>Immunogen:</b>	Phosphopeptide corresponding to amino acids 817–825 of human Retinoblastoma [pT821]
<b>Alternate Names:</b>	p105-Rb, Retinoblastoma
<b>Apparent MW:</b>	~110 kDa
<b>Gene ID:</b>	5925
<b>Protein Accession No.:</b>	P06400
<b>Sequence Identity:</b>	Human
<b>Sequence Homology:</b>	Mouse, Rat, Monkey, Rabbit
<b>Clone/PAD:</b>	16HCLC
<b>Lot:</b>	See product label

### Product Applications

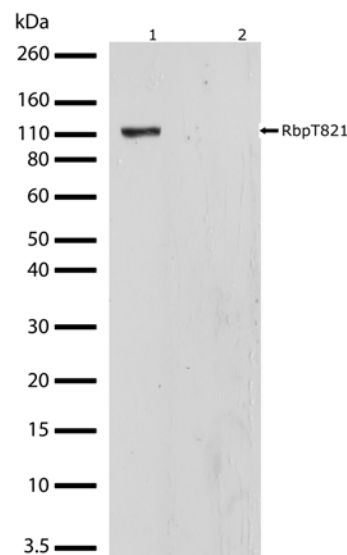
Application	Species	Test Material	Concentration
Western blotting	Human	Colo 205 cells	1–3 µg/mL
Immunocytochemistry	Human	HeLa cells	1–2 µg/mL
Indirect ELISA	Human	Phosphopeptide	1.5×10 <sup>-4</sup> to 3 µg/mL

### Storage and Handling

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

### Stability

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



**Figure 1** Western blot analysis of ABfinity™ Rb [pT821] Recombinant Rabbit Oligoclonal Antibody (Cat. no. 710314).

Western blot analysis was performed on Colo 205 whole cell extracts (**lane 1**). Endogenous levels of phosphorylated Rb was detected at ~110 kDa using ABfinity™ Rb [pT821] Recombinant Rabbit Oligoclonal Antibody at a concentration of 2 µg/mL. To confirm specificity, competition was performed with the phosphopeptide to inhibit antibody binding (**lane 2**). 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 human or animal therapeutic or diagnostic use.**

Manufacturing Site • 7335 Executive Way • Frederick • MD 21704 • E-mail: [techsupport@lifetech.com](mailto:techsupport@lifetech.com)

## Product Documentation

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

## Related Products

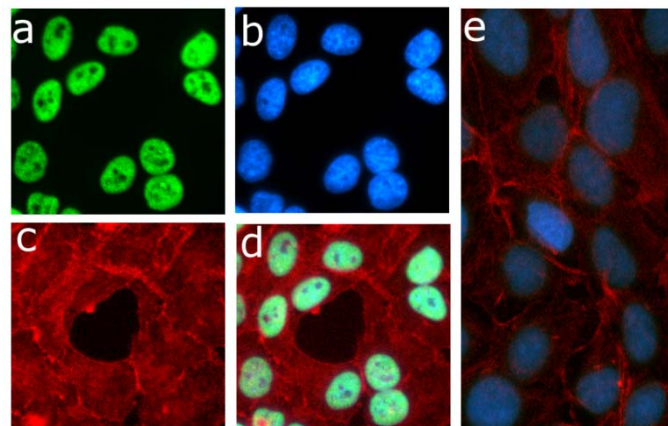
Product Name	Quantity	Catalog No.
iBlot <sup>®</sup> Dry Blotting System	1 unit	IB1001
WesternBreeze <sup>®</sup> Chromogenic Kit Anti-Rabbit	1 kit	WB7105
WesternBreeze <sup>®</sup> Chemiluminescent Kit, Anti-Rabbit	1 kit	WB7106
Goat anti-mouse (H+L), HRP conj.	1 mg	G21040
Goat anti-rabbit (H+L), HRP conj.	1 mg	G21234
Goat anti-mouse (H+L), AP conj.	1 mg	G21060
Goat anti-rabbit (H+L), AP conj.	1 mg	G21079
Nitrocellulose, 0.2 µm	20/pack	LC2000

### Explanation of symbols

Symbol	Description	Symbol	Description
	Catalogue Number		Batch code
	Research Use Only		In vitro diagnostic medical device
	Use by		Temperature limitation
	Manufacturer		European Community authorised representative
	Without, does not contain		With, contains
	Protect from light		Consult accompanying documents
	Directs the user to consult instructions for use (IFU), accompanying the product.		

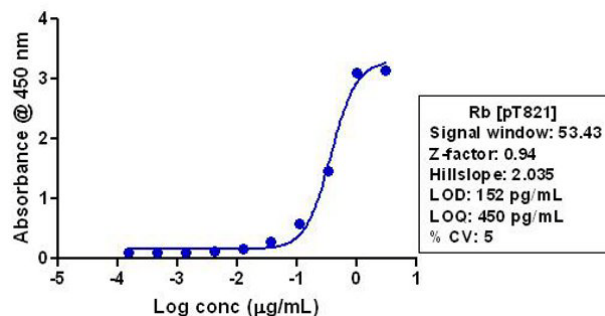
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**Figure 2** Immunocytochemistry analysis of ABfinity™ Rb [pT821] Recombinant Rabbit Oligoclonal Antibody (Cat. No. 710314).

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



**Figure 3** Indirect ELISA of ABfinity™ Rb [pT821] Recombinant Rabbit Oligoclonal Antibody (Cat. no. 710314).

Indirect ELISA was performed using various dilutions of ABfinity™ Rb [pT821] Recombinant Rabbit Oligoclonal Antibody 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.

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