

ABfinity™ Rb [pT821] Recombinant Rabbit Monoclonal Antibody

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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 Thr⁸²¹ 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 ⁻⁴ 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.

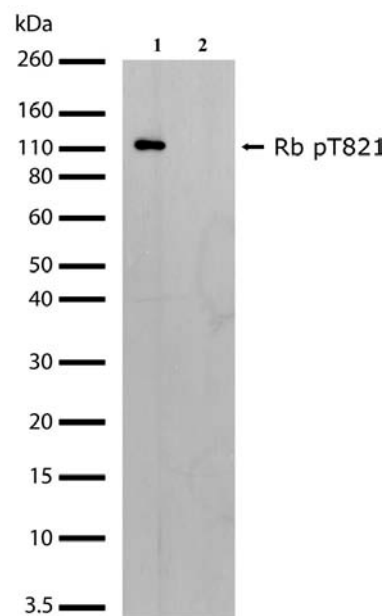


Figure 1 Western blot analysis of ABfinity™ Rb [pT821] Recombinant Rabbit Monoclonal Antibody (Cat. no. 701290).

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.

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

Manufacturing Site • 7335 Executive Way • Frederick • MD 21704 • E-mail: techsupport@lifetech.com

Product Documentation

To obtain a Certificate of Analysis or SDS, visit 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

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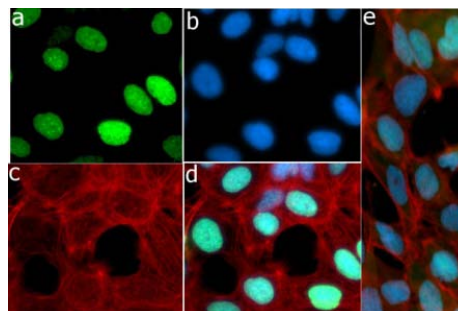


Figure 2 Immunocytochemistry analysis of ABfinity™ Rb [pT821] Recombinant Rabbit Monoclonal Antibody (Cat. no. 701290).

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.

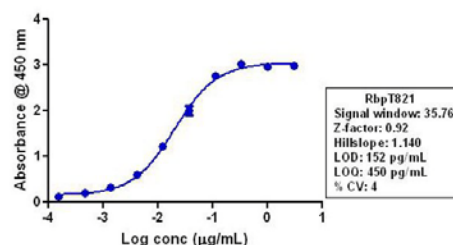


Figure 3 Indirect ELISA of ABfinity™ Rb [pT821] Recombinant Rabbit Monoclonal Antibody (Cat. no. 701290).

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

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