

ABfinity™ Rb [pS780] Recombinant Rabbit Monoclonal Antibody

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Rev. 1.00

Catalog Number: 701272

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 [pS780]
Predicted Reactivity: Human

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 serine 780 by the Aurora B kinase regulates the postmitotic checkpoint to prevent endoreduplication after an aberrant mitosis. In humans, the protein is encoded by the RB1 gene located on the q arm of chromosome 13.

Product Specifications

Immunogen: Phosphopeptide corresponding to amino acids 775–786 of human Retinoblastoma [pS780]
Alternate Names: p105-Rb, Retinoblastoma
Apparent MW: ~110 kDa
Gene ID: 5925
Protein Accession No.: P06400
Sequence Identity: Human
Sequence Homology: Mouse, Rat, Drosophilla, Monkey, Rabbit

Clone/PAD: 13H9L5
Lot: 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 ⁻⁴ 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.

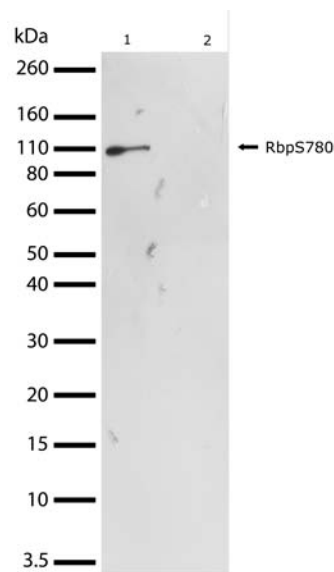


Figure 1 Western blot analysis of ABfinity™ Rb [pS780] Recombinant Rabbit Monoclonal Antibody (Cat. no. 701272).

Western blot analysis was performed on Colo205 whole cell extracts (**lane 1**). Endogenous levels of phosphorylated Rb was detected at ~110 kDa using ABfinity™ Rb [pS780] Recombinant Rabbit Monoclonal 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.

Stability

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

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

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
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.		

Limited Product Warranty

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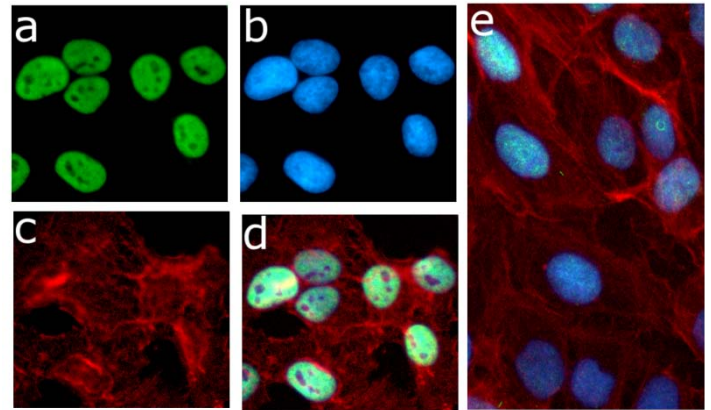


Figure 2 Immunocytochemistry analysis of ABfinity™ Rb[pS780] Recombinant Rabbit Monoclonal Antibody (Cat. no. 701272).

Immunocytochemistry of U2OS cells stained with ABfinity™ Rb [pS780] Recombinant Rabbit Monoclonal Antibody, using **a:** Alexa Fluor® 488 goat anti-rabbit as a secondary antibody (green). **b:** DAPI stained U2OS nuclei (blue). **c:** Actin stained with Alexa Fluor® 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.

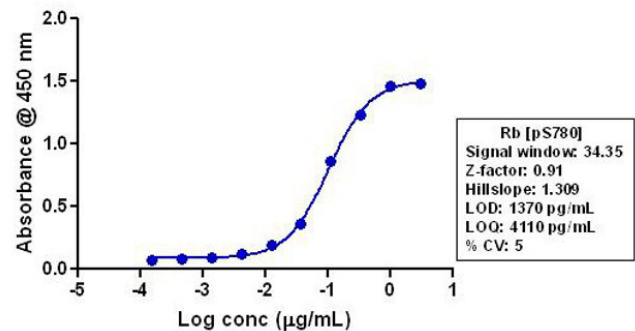


Figure 3 Indirect ELISA of ABfinity™ Rb [pS780] Recombinant Rabbit Monoclonal Antibody (Cat. no. 701272).

Indirect ELISA was performed using various dilutions of ABfinity™ Rb [pS780] Recombinant Rabbit Monoclonal Antibody to detect Rb[pS780] 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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