

ABfinity™ p21 Recombinant Rabbit Monoclonal Antibody

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Rev. 1.00

Catalog Number: 701151

Store at 2 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 p21 protein
Predicted Reactivity: Human

Product Description

The p21 protein is a tumor suppressor that inhibits Cyclin-dependent kinases (CDK), and is transcriptionally activated by p53. It is important in the response of cells to genotoxic stress, and is a major transcriptional target of the p53 protein. In the nucleus, p21 binds and inhibits the activity of Cdk1 and Cdk2. This blocks the G1 to S phase, or G2 to mitosis transitions after DNA damage to enable the repair of damaged DNA. In the cytoplasm, p21 protein has an anti-apoptotic effect. It is able to bind to and inhibit caspase 3, ASK1, and JNK.

Product Specifications

Immunogen: Peptide corresponding to amino acids 217–227 of Human p21 protein
Alternate Names: CAP20, CDKN1, CIP1
Apparent MW: ~21 kDa
Gene ID: 1026
Protein Accession No.: P38936
Sequence Identity: Human
Sequence Homology: Mouse, Rat, Rabbit, Horse
Clone/PAD: 2H2L13
Lot: See product label

Product Applications

Application	Species	Test Material	Concentration
Western blotting	Human	HeLa and MCF7 cells	2–5 µg/mL
Immunocytochemistry	Human	U2OS cells	1–3 µg/mL
Indirect ELISA	Human	Peptide	1.5 × 10 ⁻⁴ to 3 µg/mL

Storage and Handling

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

Stability

Expires one year from date of receipt when stored as instructed.

Storage Buffer

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

Caution: Sodium azide is an extremely toxic and dangerous compound particularly when combined with acids or metals. Properly dispose of solutions containing sodium azide.

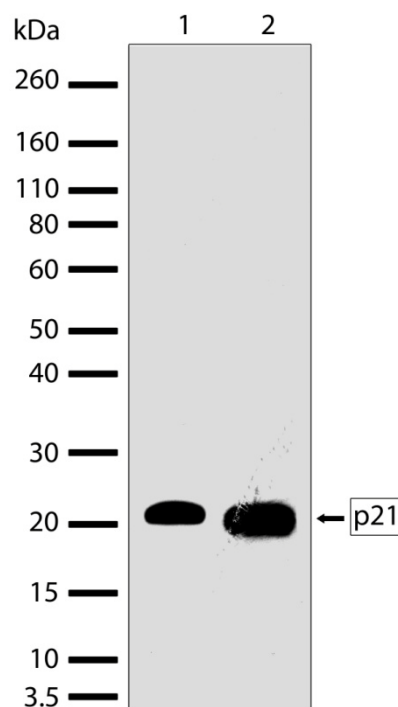


Figure 1 Western blot analysis of ABfinity™ p21 Recombinant Rabbit Monoclonal Antibody (Cat. no. 701151). Western blot analysis was performed on whole cell extracts of HeLa (lane 1) and MCF7 (lane 2). Endogenous p21 at ~21 kDa was detected using ABfinity™ p21 Recombinant Rabbit Monoclonal Antibody at a concentration of 2 µg/mL. The blot was developed using chemiluminescence (ECL) method.

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 Safety Data Sheets (SDSs), 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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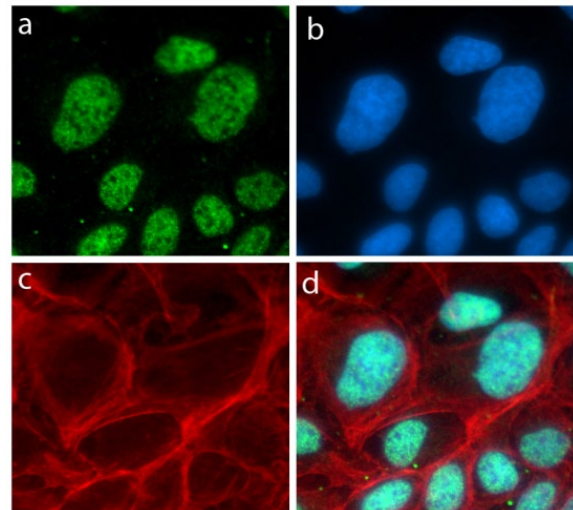


Figure 2 Immunocytochemistry analysis of ABfinity™ p21 Recombinant Rabbit Monoclonal Antibody (Cat. no. 701151). Immunocytochemistry analysis of U2OS cells stained with ABfinity™ p21 Recombinant Rabbit Monoclonal Antibody, using a: Alexa Fluor® 488 goat anti-rabbit as a secondary antibody (green). b: DAPI stained U2OS nuclei (blue). c: Actin stained with Alexa Fluor® 594 phalloidin (red). d: Composite image of cells showing nuclear localization of p21.

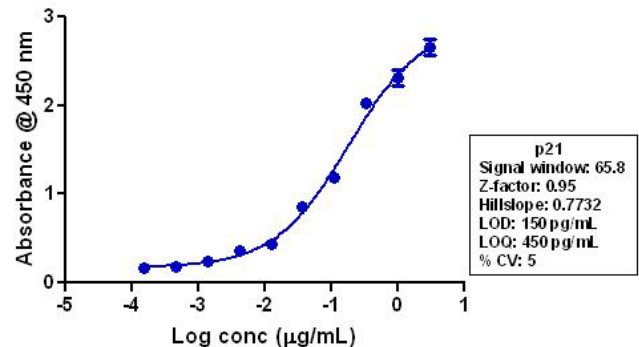


Figure 3 Indirect ELISA of p21 (CDKN1), Rabbit mAb (2H2L13), ABfinity™ Recombinant Monoclonal Antibody (Cat. no. 701151). Indirect ELISA was performed using various dilutions of p21 (CDKN1), Rabbit mAb (2H2L13), ABfinity™ Recombinant Monoclonal Antibody (Cat. no. 701151) to detect p21 peptide coated 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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