

ABfinity™ p53 [AcK382] Recombinant Rabbit Monoclonal Antibody

Publication Number: MAN0007169

Rev. 1.00

Catalog Number: 701270

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 p53 [AcK382]
Predicted Reactivity: Human

Product Description

The p53 tumor suppressor protein plays a major role in cellular response to DNA damage and other genomic aberrations. Activation of p53 can lead to either cell cycle arrest and DNA repair, or apoptosis. p53 acetylation at Lys³⁸² is required for recruitment of p300 to the p21 promoter, and is mediated by p300 and CBP acetyltransferases. Acetylation appears to play a positive role in the accumulation of p53 protein in stress responses, and inhibition of deacetylation stabilizes p53.

Product Specifications

Immunogen: Peptide corresponding to amino acids 377–386 of human p53 [AcK382]
Alternate Names: TP53, TRP53
Apparent MW: 53 kDa
Gene ID: 7157
Protein Accession No.: P04637
Sequence Identity: Human
Sequence Homology: Mouse, Rat, Monkey, Rabbit
Clone/PAD: 10 H13L14
Lot: See product label

Product Applications

| Application | Species | Test Material | Concentration |
|---------------------|---------|---------------|-----------------------------------|
| Western blotting | Human | HeLa cells | 1–3 µg/mL |
| Immunocytochemistry | Human | HeLa cells | 1 µg/mL |
| Indirect ELISA | Human | Peptide | 1.5 × 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.

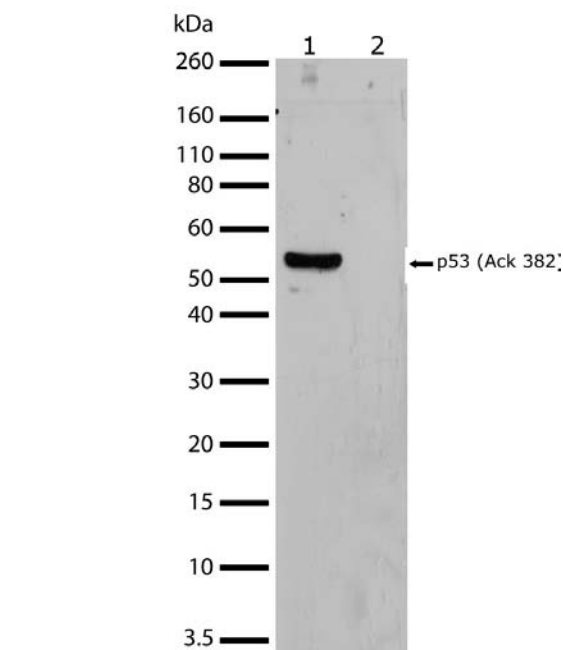


Figure 1 Western blot analysis of ABfinity™ p53 [AcK382] Recombinant Rabbit Monoclonal Antibody (Cat. no. 701270).

Western blot analysis was performed on whole cell extracts from HeLa cells treated with doxorubicin (0.2 µM) and sodium butyrate (5 mM) lysate. Endogenous levels of acetylated p53 [AcK382] was detected at ~53 kDa using ABfinity™ p53 [AcK382] Recombinant Rabbit Monoclonal Antibody at a concentration of 2 µg/mL (lane 1). To confirm specificity, competition was performed by preincubation with phosopeptide 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.

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.

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. If you have any questions, please contact Life Technologies at www.lifetechnologies.com/support.

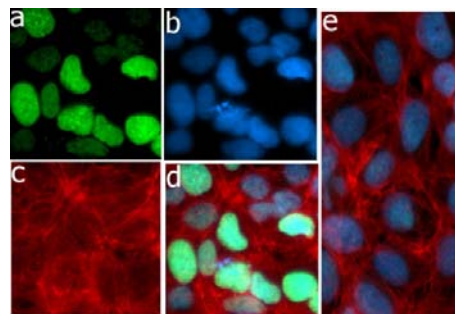


Figure 2 Immunocytochemistry analysis of ABfinity™ p53 [AcK382] Recombinant Rabbit Monoclonal Antibody (Cat. no. 701270).

Immunocytochemistry analysis of HeLa cells treated with 0.2 μM doxorubicin and 5 mM sodium butyrate for 24 hours, stained with ABfinity™ p53 (AcK 382) Recombinant Rabbit Monoclonal Antibody, using **a**: Alexa Fluor® 488 goat anti-rabbit as 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 acylated p53. **e**: Composite image of cells showing inhibition of antibody binding after competition with acylated peptide.

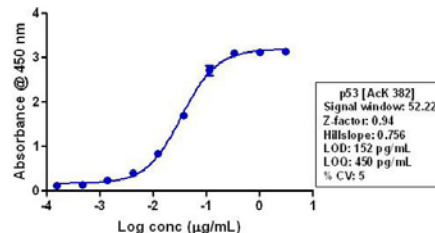


Figure 3 Indirect ELISA of ABfinity™ p53 [AcK382] Recombinant Rabbit Monoclonal Antibody Cat. no. 701270).

Indirect ELISA was performed using various dilutions of ABfinity™ p53 [AcK382] Recombinant Rabbit Monoclonal Antibody to detect p53 [AcK382] peptide 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.

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 or email techsupport@lifetech.com

www.lifetechnologies.com

15 September 2012

