

ABfinity™ Histone H3 [pS10] Recombinant Rabbit Monoclonal Antibody

Publication Number: MAN0007168

Rev. 1.00

Catalog Number: 701258

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 Histone H3 [pS10]
Predicted Reactivity: Human

Product Description

Histone H3 is one of four core histone proteins (H2A, H2B, H3 and H4) forming the nucleosomes that serve as the basic unit of chromatin in eukaryotic cells. The amino-terminal tails of core histones undergo post-translational modifications that have a direct effect on the accessibility of chromatin to transcription factors, thus playing an important role in transcription. Phosphorylation at Ser¹⁰, Ser²⁸ and Thr¹¹ of histone H3 is tightly correlated with chromosome condensation during mitosis and meiosis. This antibody specifically recognizes histone H3 protein phosphorylated at Ser¹⁰.

Product Specifications

Immunogen: Phosopeptide corresponding to amino acids 4–16 of human Histone H3 [pS 10]
Alternate Names: HIST1H3A
Apparent MW: 17 kDa
Gene ID: 126961
Protein Accession No.: P68431
Sequence Identity: Human
Sequence Homology: Mouse, Rat, Monkey, Rabbit
Clone/PAD: 9H12L10
Lot: See product label

Product Applications

Application	Species	Test Material	Concentration
Western blotting	Human	HeLa cells	2–3 µg/mL
Immunocytochemistry	Human	HeLa cells	1 µg/mL
Indirect ELISA	Human	Phosopeptide	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.

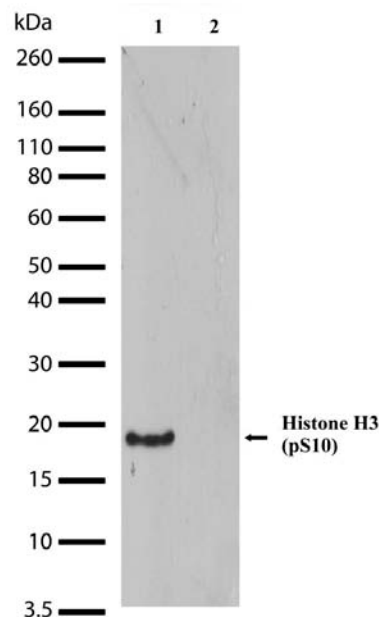


Figure 1 Western blot analysis of ABfinity™ Histone H3 [pS10] Recombinant Rabbit Monoclonal Antibody (Cat. no. 701258).

Western blot analysis was performed on whole cell extracts from HeLa cells treated with Calyculin A. Endogenous levels of phosphorylated Histone H3 [pS10] was detected at ~17 kDa using ABfinity™ Histone H3 [pS10] 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.

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

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.

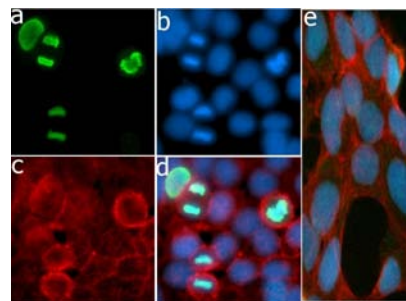


Figure 2 Immunocytochemistry analysis of ABfinity™ Histone H3 [pS10] Recombinant Rabbit Monoclonal Antibody (Cat. no. 701258).

Immunocytochemistry analysis of serum starved HeLa cells stained with ABfinity™ Histone H3 [pS10] 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 phosphorylated Histone H3 [pS10]. e: Composite image of cells showing inhibition of antibody binding after competition with the phosphopeptide.

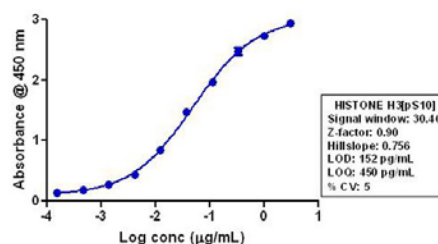


Figure 3 Indirect ELISA of ABfinity™ Histone H3 [pS10] Recombinant Rabbit Monoclonal Antibody (Cat. no. 701258).

Indirect ELISA was performed using various dilutions of ABfinity™ Histone H3 [pS10] Recombinant Rabbit Monoclonal Antibody to detect Histone H3 [pS10] 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

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

life
technologies™