

ABfinity™ Histone H3 (C-terminal) Recombinant Rabbit Monoclonal Antibody

Store at 2°C to 8°C (short-term), or -20°C (long-term)

Catalog Number: 701517

Pub. No. MAN0009919 Rev. A.00

Clonality: Monoclonal	Quantity: 100 µg	Volume: 200 µL	Concentration: 0.5 mg/mL
Host/Class: Rabbit	Reactivity: Human	Predicted Reactivity: Human Histone H3 subunit	

Product description

Histone H3 is one of the DNA-binding proteins found in the chromatin of all eukaryotic cells. H3 along with four core histone proteins (H2A, H2B, H3, and H4) binds to DNA forming the structure of the nucleosome. Histones play a central role in transcription regulation, DNA repair, DNA replication and chromosomal stability. Post translationally, histones are modified in a variety of ways to either directly change the chromatin structure or allow for the binding of specific transcription factors.

The N-terminal tail of histone H3 protrudes from the globular nucleosome core and can undergo several different types of post-translational modification that influence cellular processes. These modifications include the covalent attachment of methyl or acetyl groups to lysine and arginine amino acids and the phosphorylation of serine or threonine.

Product specifications

Immunogen:	A peptide corresponding to amino acids 120–136 of the human histone H3 subunit.
Alternate Names:	H3.3A, H3F3
Apparent MW:	~17 kDa
Gene ID:	3021
Protein Accession No.:	P68431
Sequence Identity:	Human
Sequence Homology:	Monkey, Sheep, Bovine, Mouse, Rat
Clone/PAD:	24HC2 LC12
Isotype:	IgG
Lot:	See product label

Product applications

Application	Species	Test Material	Concentration
Western blotting	Human	HeLa cells	0.5 µg/mL
Indirect ELISA	Human	Peptide	1.5 × 10 ⁻⁴ to 3 µg/mL
Immunocytochemistry	Human	HeLa cells	2 µg/mL

Because conditions may vary, it is recommended that each investigator determine the optimal amount of antibody to be used for each application.

For Research Use Only. Not for use in diagnostic procedures

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

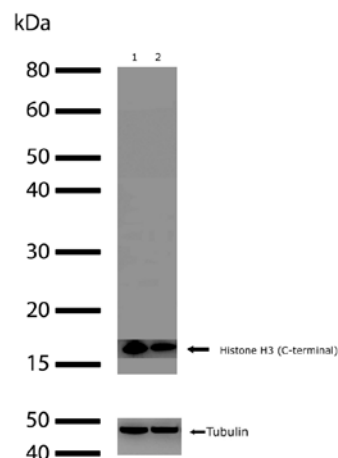


Figure 1 Western Blot analysis of ABfinity™ Histone H3 (C-terminal) Recombinant Rabbit Monoclonal Antibody (Cat. no. 701517).

Western blot analysis was performed on whole lysates (30 µg each) from HeLa cells treated with 5 mM sodium butyrate for 24 hours (Lane 1), and untreated HeLa cells (Lane 2). Endogenous levels of histone H3 was detected at ~17 kDa using ABfinity™ Histone H3 (C-terminal) Recombinant Rabbit Monoclonal Antibody at a concentration of 1 µg/mL. A rabbit anti-tubulin antibody was blotted as a loading control. The blots were developed using chemiluminescence (ECL) method with a goat anti rabbit HRP secondary antibody (Cat no. G21234).

Storage and handling

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

Stability

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

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 Sheet (SDS) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves. SDSs are available at www.lifetechologies.com/support.

Product documentation

To obtain a Certificate of Analysis or Safety Data Sheets (SDSs), visit www.lifetechnologies.com/support.

Related products

Product Name	Quantity	Cat. No.
WesternBreeze® Chromogenic Kit Anti-Rabbit	1 kit	WB7105
WesternBreeze® Chemiluminescent Kit Anti-Rabbit	1 mg	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
Streptavidin Agarose	5 mL	SA10004

Important Licensing Information

This product may be covered by one or more Limited Use Label Licenses. By use of this product, you accept the terms and conditions of all applicable Limited Use Label Licenses.

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.

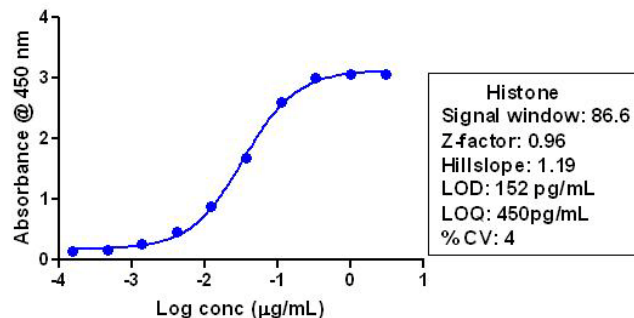


Figure 2 Indirect ELISA analysis of ABfinity™ Histone H3 (C-terminal) Recombinant Rabbit Monoclonal Antibody (Cat. no. 701517).

Indirect ELISA was performed with various dilutions of ABfinity™ Histone H3 (C-terminal) Recombinant Rabbit Monoclonal Antibody (Cat. no. 701517) to detect C-terminal histone H3 peptide coated onto the plate using a goat anti-rabbit HRP secondary antibody. A non-linear regression analysis was performed (4 PL) and LOD and LOQ for the antibody was determined.



Figure 3 Immunocytochemistry analysis of ABfinity™ Histone H3 (C-terminal) Recombinant Rabbit Monoclonal Antibody (Cat. no. 701517).

Immunocytochemistry analysis of HeLa cells stained with ABfinity™ Histone H3 (C-terminal) Recombinant Rabbit Monoclonal Antibody using a: Alexa Fluor® 488 goat anti-rabbit as a secondary antibody (green). b: DAPI stained HeLa nuclei (blue). c: Composite image of cells showing cytoplasmic localization of histone H3.

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		

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15 January 2014

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