


Product datasheet

Anti-Histone H1.0 antibody [34] ab11079

KO VALIDATED

★★★★☆ [2 Abreviews](#) [31 References](#) [6 Images](#)

Overview

Product name	Anti-Histone H1.0 antibody [34]
Description	Mouse monoclonal [34] to Histone H1.0
Host species	Mouse
Tested applications	Suitable for: WB, IHC-P
Species reactivity	Reacts with: Human, Recombinant fragment Predicted to work with: Mouse, Rat, Xenopus laevis, Vertebrata  Does not react with: Bird
Immunogen	Full length native protein (purified) corresponding to Cow Histone H1.0.
Epitope	This antibody recognises an epitope within aa20-30. Proline 26 is not essential for recognition by the antibody. See Gorka et al. 1998 for more information.
Positive control	WB: A431, MCF7 and HeLa cell lysate; Histone H1.0 (Human) - Recombinant Protein. IHC-P: Human breast adenocarcinoma tissue.
General notes	<p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact orders@abcam.com.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide

	Constituents: PBS, 6.97% L-Arginine
Purity	Protein G purified
Clonality	Monoclonal
Clone number	34
Myeloma	NS1/1-Ag4-1
Isotype	IgG1

Applications

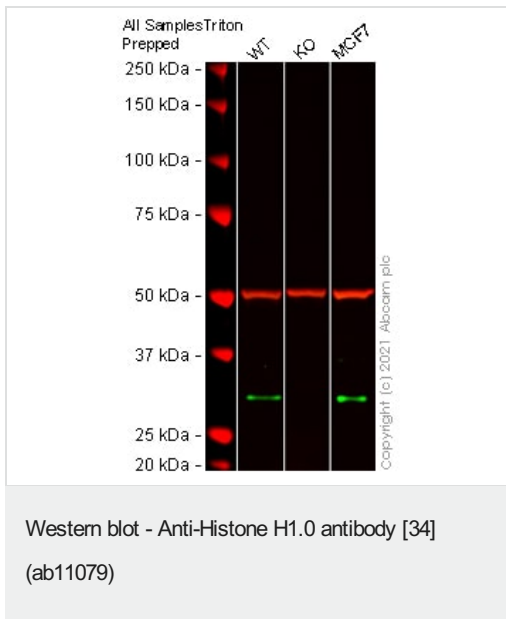
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab11079 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (2)	Use a concentration of 1 µg/ml. Detects a band of approximately 32 kDa (predicted molecular weight: 20 kDa).
IHC-P		Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

Target

Function	Histones H1 are necessary for the condensation of nucleosome chains into higher-order structures. The H1F0 histones are found in cells that are in terminal stages of differentiation or that have low rates of cell division.
Sequence similarities	Belongs to the histone H1/H5 family. Contains 1 H15 (linker histone H1/H5 globular) domain.
Post-translational modifications	Phosphorylated on Ser-17 in RNA edited version.
Cellular localization	Nucleus. Chromosome. The RNA edited version has been localized to nuclear speckles. During mitosis, it appears in the vicinity of condensed chromosomes.

Images



All lanes : Anti-Histone H1.0 antibody [34] (ab11079) at 1/500 dilution

Lane 1 : Wild-type A431 cell lysate

Lane 2 : H1F0 knockout A431 cell lysate

Lane 3 : MCF7 (Human breast adenocarcinoma cell line) whole cell lysate

Lysates/proteins at 40 µg per lane.

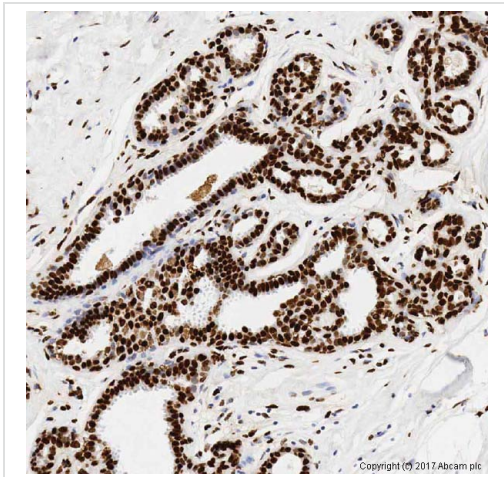
Performed under reducing conditions.

Predicted band size: 20 kDa

Observed band size: 30 kDa

Lanes 1 - 3: Merged signal (red and green). Green - ab11079 observed at 30 kDa. Red - loading control **ab52866** (Rabbit anti-alpha Tubulin antibody [EP1332Y]) observed at 55 kDa.

ab11079 was shown to react with Histone H1.0 in wild-type A431 cells in Western blot with loss of signal observed in H1F0 knockout sample. Wild-type A431 and H1F0 knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3 % milk in TBS-T (0.1 % Tween®) before incubation with ab11079 and **ab52866** (Rabbit anti-alpha Tubulin antibody [EP1332Y]) overnight at 4°C at a 1 in 500 dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Mouse IgG H&L (IRDye® 800CW) preabsorbed (**ab216772**) and Goat anti-Rabbit IgG H&L (IRDye® 680RD) preabsorbed (**ab216777**) secondary antibodies at 1 in 20000 dilution for 1 h at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Histone H1.0 antibody [34] (ab11079)

IHC image of Histone H1.0 staining in a formalin fixed, paraffin embedded human breast adenocarcinoma tissue section*, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab11079, 5µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre



Western blot - Anti-Histone H1.0 antibody [34] (ab11079)

All lanes : Anti-Histone H1.0 antibody [34] (ab11079) at 1 µg/ml

Lane 1 : Histone H1.0 (Human) - Recombinant Protein

Lane 2 : Histone H1.2 (Human) - Recombinant Protein

Lysates/proteins at 0.1 µg per lane.

Secondary

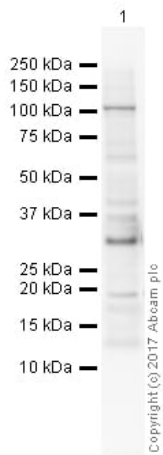
All lanes : Goat polyclonal to Mouse IgG - H&L - Pre-Adsorbed (HRP) ([ab65485](#)) at 1/5000 dilution

Performed under reducing conditions.

Predicted band size: 20 kDa

Observed band size: 32 kDa

Exposure time: 10 seconds



Western blot - Anti-Histone H1.0 antibody [34]
(ab11079)

Anti-Histone H1.0 antibody [34] (ab11079) at 1 µg/ml + HeLa
(Triton-enriched) Cell Lysate at 10 µg

Secondary

Goat polyclonal to Mouse IgG - H&L - Pre-Adsorbed (HRP)
(**ab65485**) at 1/5000 dilution

Performed under reducing conditions.

Predicted band size: 20 kDa

Observed band size: 32 kDa

Additional bands at: 120 kDa, 18 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 8 minutes

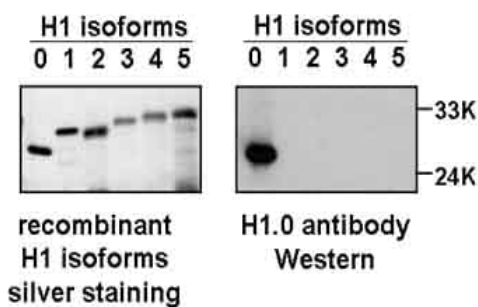


Western blot - Anti-Histone H1.0 antibody [34]
(ab11079)

Western blot using ab11079 on HeLa whole cell extract (30
µg/lane).

Exposure 5 sec using ECL.

12.5% SDS-PAGE gel.



Western blot - Anti-Histone H1.0 antibody [34]
(ab11079)

Dr Albert Jordan, Center for Genomic Regulation
(CRG), Spain.

Mouse monoclonal to Histone H1.0 against recombinant human H1
isoforms H1.0 to H1.5 as depicted in the figure.

Dilution 1/1000.

Recombinant H1 isoforms courtesy of Dr Nicole Happel.

(see attached review)

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