

Datasheet: 4974-7808

Description:	MOUSE ANTI HUMAN HISTONE H1
Specificity:	HISTONE H1
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AE-4
Isotype:	IgG2a
Quantity:	0.2 mg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Immunohistology - Frozen (1)	▪			
Immunohistology - Paraffin	▪			
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting	▪			1/100
Immunofluorescence	▪			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using the appropriate negative/positive controls.

(1) **Acetone or PFA fixation is recommended**

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)

Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Nuclei from myeloid leukemia biopsy cells.
RRID	AB_2114841
Specificity	<p>Mouse anti Human Histone H1 antibody, clone AE-4 recognizes histone H1.</p> <p>The histone proteins serve as a structural scaffold for the organization of nuclear DNA into chromatin. In eukaryotic cells there are 4 core histone proteins, H2A, H2B, H3 and H4 that assemble to form an octamer round which the DNA is wrapped in a sequence dependant manner. The resulting complex is known as a nucleosome and is the basic subunit of chromatin. Histone H1 acts as a linker and binds to each nucleosome, and by self affinity, links these nucleosomes together resulting in the 30 nm chromatin fiber.</p> <p>In blots of rat brain homogenate a duplet is observed at ~27-29 kDa consistent with Histone H1. Speckled staining is observed in the nucleus of normal and malignant cells.</p>
Histology Positive Control Tissue	Tonsil
References	<ol style="list-style-type: none"> Swindle, C.S. & Engler, J.A. (1998) Association of the human papillomavirus type 11 E1 protein with histone H1. J Virol. 72 (3): 1994-2001. Hole, P.S. <i>et al.</i> (2010) Ras-induced reactive oxygen species promote growth factor-independent proliferation in human CD34+ hematopoietic progenitor cells. Blood. 115 (6): 1238-46. Thorogate, R. <i>et al.</i> (2008) A novel fluorescence-based method in forensic science for the detection of blood <i>in situ</i>. Forensic Sci Int Genet. 2 (4): 363-71. Morgan, R.G. <i>et al.</i> (2013) γ-Catenin is overexpressed in acute myeloid leukemia and promotes the stabilization and nuclear localization of β-catenin. Leukemia. 27 (2): 336-43. Alanazi, B. <i>et al.</i> (2019) Integrated nuclear proteomics and transcriptomics identifies S100A4 as a therapeutic target in acute myeloid leukemia. Leukemia. Oct 14 [Epub ahead of print].
Further Reading	<ol style="list-style-type: none"> Wang, X. <i>et al.</i> (2004) Histone H1-like protein participates in endothelial cell-specific activation of the von Willebrand factor promoter. Blood. 104 (6): 1725-32.
Storage	<p>This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.</p>
Guarantee	12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10040 available at:
<https://www.bio-rad-antibodies.com/SDS/4974-7808>
10040

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...) [HRP](#)
Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)
Goat Anti Mouse IgG (STAR76...) [RPE](#)
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)
Goat Anti Mouse IgG (STAR70...) [FITC](#)
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®550](#),
[DyLight®650](#), [DyLight®680](#), [DyLight®800](#),
[FITC](#), [HRP](#)
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL \(MCA929\)](#)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)
'M405282:220916'

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