

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]. Rastogi, N. <i>et al.</i> (2023) Nuclear factor I-C overexpression promotes monocytic development and cell survival in acute myeloid leukemia. Leukemia. 37 (2): 276-87.
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

Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
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 (STAR13...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	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
----------------------------------	---	------------------	---	---------------	---

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'

Printed on 03 Dec 2024