

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
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.

Specificity**Mouse anti Human Histone H1 antibody, clone AE-4** recognizes histone H1.

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.

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.

Histology Positive Control Tissue

Tonsil

References

1. 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.](#)
2. Hole, P.S. *et al.* (2010) Ras-induced reactive oxygen species promote growth factor-independent proliferation in human CD34+ hematopoietic progenitor cells. [Blood. 115:1238-46.](#)
3. Thorogate, R. *et al.* (2008) A novel fluorescence-based method in forensic science for the detection of blood *in situ*. [Forensic Sci Int Genet. 2 \(4\): 363-71.](#)
4. Morgan, R.G. *et al.* (2013) γ -Catenin is overexpressed in acute myeloid leukemia and promotes the stabilization and nuclear localization of β -catenin. [Leukemia. 27 \(2\): 336-43.](#)

Further Reading

1. Wang, X. *et al.* (2004) Histone H1-like protein participates in endothelial cell-specific activation of the von Willebrand factor promoter. [Blood. 104\(6\): 1725-1732.](#)

Storage

Store at +4°C or at -20°C if preferred.

Storage in frost-free freezers is not recommended.

This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life

18 months from date of despatch.

Health And Safety Information

Material Safety Datasheet documentation #10040 available at:
10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

- Goat Anti Mouse IgG (STAR76...) [RPE](#)
- Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)
- Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight@488](#), [DyLight@549](#),
[DyLight@649](#), [DyLight@680](#), [DyLight@800](#),
[FITC](#), [HRP](#)
- Rabbit Anti Mouse IgG (STAR9...) [FITC](#)
- Goat Anti Mouse IgG (STAR77...) [HRP](#)
- Rabbit Anti Mouse IgG (STAR12...) [RPE](#)

Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)
Rabbit Anti Mouse IgG (STAR8...) [DyLight®800](#)
Goat Anti Mouse IgG (STAR70...) [FITC](#)
Human Anti Mouse IgG2a (HCA037...) [FITC](#), [HRP](#)
Rabbit Anti Mouse IgG (STAR13...) [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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