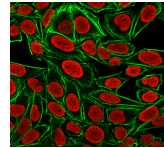


Histone H1 Monoclonal Mouse Antibody (AE-4)



Product Description

Eukaryotic histones are basic, water-soluble nuclear proteins that form hetero-octameric nucleosome particles. They wrap 146 base pairs of DNA in a left-handed superhelical turn sequentially to form chromosomal fiber. Two molecules of each of the four core histones (H2A, H2B, H3, and H4) form the octamer; formed of two H2A-H2B dimers and two H3-H4 dimers, forming two nearly symmetrical halves by tertiary structure. Over 80% of nucleosomes contain the linker Histone H1, derived from an intronless gene that interacts with linker DNA between nucleosomes and mediates compaction into higher order chromatin. Histones are subject to posttranslational modification by enzymes primarily on their N-terminal tails, but also in their globular domains. Such modifications include methylation, citrullination, acetylation, phosphorylation, sumoylation, ubiquitination and ADP-ribosylation. Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors. **Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order. **Catalog number key for antibody number 0096, Anti-Histone H1 (AE-4)**

References

Note: References for this clone sold by other suppliers may be listed for expected applications.

1. J Psychiatry Neurosci (2009) 34(3): 232-237. (Western)
2. Genes & Dev (2011) 25:845-862. (ChIP)

Product attributes

Antibody number	#0096
Antibody reactivity (target)	Histone H1
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	AE-4
Isotype	IgG2a, kappa
Molecular weight	~30 kDa
Synonyms	H1(0), H1.1, H1.2, H1.3, H1.4, H1.5, H1A, H1F0, H1F1, H1F2, H1F3, H1F4, H1F5, H1FNT, H1FOO, H1FT, H1FV, H1FX, H1I, H1T2, H1X, HANP1, His1, HisC, HIST1, HIST1H1A, HIST1H1B, HIST1H1C, HIST1H1D, HIST1H1E, HIST1H1T, Oocyte-specific histone H1, Testicular H1 histone
Human gene symbol	H1
Entrez gene ID	3005
SwissProt	Multiple
Unigene	226117 & 97358
Immunogen	Nuclei of human leukemia biopsy cells
Antibody target cellular localization	Nucleus
Verified antibody applications	Flow (intracellular) (verified), IF (verified), IHC (FFPE) (verified)
Species reactivity	Human, Mouse, Rat
Expected antibody applications	ChIP (published for clone), IP (published for clone), WB (published for clone)
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Immunofluorescence: 0.5-1 ug/mL. Immunohistochemistry formalin-fixed 0.5-1 ug/mL. Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes. Flow Cytometry 0.5-1 ug/million cells/0.1 mL. Optimal dilution for a specific application should be determined by user
Positive control	HeLa, A-431, LNCap or Jurkat cells. Breast carcinoma.
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Antibody research areas	Organelle markers

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405
BNC88	CF®488A	490/515	488	GFP, FITC
BNC68	CF®568	562/583	532, 561	RFP, TRITC
BNC94	CF®594	593/614	561	Texas Red®
BNC40	CF®640R	642/662	633-640	Cy®5
BNC47	CF®647	650/665	633-640	Cy®5
BNCB	Biotin	N/A	N/A	N/A
BNUB	Purified	N/A	N/A	N/A
BNUM	Purified, BSA-free	N/A	N/A	N/A

Dye Features

- [CF®405S Features](#)
- [CF®488A Features](#)
- [CF®568 Features](#)
- [CF®594 Features](#)
- [CF®640R Features](#)
- [CF®647 Features](#)

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