

Mouse Histone H1 Antibody | anti-H1 antibody

Histone H1 (Pan Nuclear Marker)

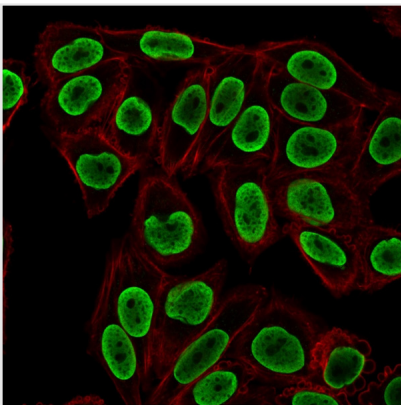
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA215008	Mouse	Human, Mouse, Rat	Immunohistochemistry, Immunofluorescence, Flow Cytometry, Functional Assay

PRODUCT SYNONYMS

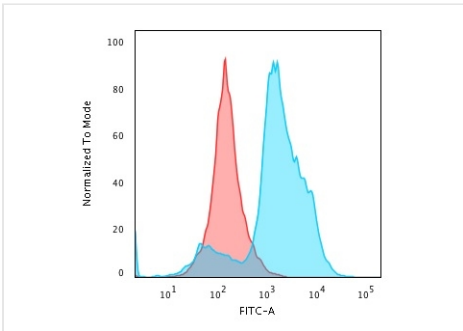
Histone H1; Histone H1 (Pan Nuclear Marker); His1; HisC; HIST1; HIST1H1A; HIST1H1B; HIST1H1C; HIST1H1D; HIST1H1E; HIST1H1T; Oocyte-specific histone H1; Testicular H1 histone; anti-H1 antibody

PRODUCT SPECIFICATIONS

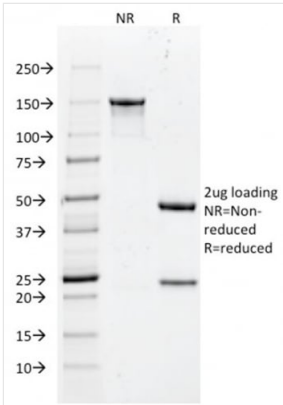
Host	Mouse
Reactivity	Human, Mouse, Rat
Isotype	IgG2a, kappa
Clone Number	rAE-4
Specificity	Please note that this antibody is a recombinant Mouse version of original anti-histone H1 antibody (Clone AE-4). Because the variable heavy (VH) and variable light (VL) domains are the same, recombinant antibody has the same exact reactivity as the original AE-4 MAb. There are several advantages of producing a recombinant version of a monoclonal antibody. For example, a recombinant antibody is a purer preparation of active immunoglobulin with no contaminating non-functional intact Ig or free light/heavy chains. Secondly, antibody can always be produced, even if hybridoma line is lost. Moreover, it adds the flexibility of converting the antibody to any species, isotype or format. Eukaryotic histones are basic and water-soluble nuclear proteins that form hetero-octameric nucleosome particles by wrapping 146 base pairs of DNA in a left-handed super-helical 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. This antibody is extensively used as a pan-nuclear marker.
Purity/Purification	Purified Ab with BSA and Azide at 200ug/ml OR Purified Ab WITHOUT BSA and Azide at 1.0mg/ml
Form/Format	200ug/ml of recombinant MAb Purified by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Sequence Length	240
Applicable Applications for anti-H1 antibody	IHC (Immunohistochemistry), IF (Immunofluorescence), FCM/FACS (Flow Cytometry)
Positive Control	HeLa, A-431, LNCap or Jurkat cells. Breast carcinoma.
Immunogen	Recombinant full-length human Histone H1 protein
Cellular Localization	Nuclear
Hu-chromosome Location	3q21-q22; 6q21-q22; 22q13.1
Antibody Type	Recombinant Mouse Monoclonal Antibody
Preparation and Storage	Antibody with azide: store at 2 to 8 degree C. Antibody without azide: store at -20 to -80 degree C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.



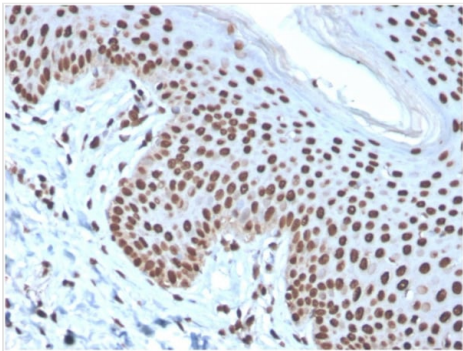
IF (Immunofluorescence)
Immunofluorescent staining of HeLa cells using Histone H1 Mouse Monoclonal Antibody (rAE-4) followed by goat anti-Mouse IgG conjugated to CF488 (green). Phalloidin is used to label cellmembrane (red).



FCM/FACS (Flow Cytometry)
Flow Cytometric Analysis of paraformaldehyde-fixed HeLa cells using Histone H1 Mouse Recombinant Monoclonal Antibody (rAE-4) followed by goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).



SDS-PAGE
SDS-PAGE Analysis Purified Histone H1 Mouse Recombinant Monoclonal Antibody (rAE-4). Confirmation of Integrity and Purity of Antibody.



IHC (Immunohistochemistry)
Formalin-fixed, paraffin-embedded human Basal Cell Carcinoma stained with Histone H1 Mouse Recombinant Monoclonal Antibody (rAE-4).

NCBI AND UNIPROT INFORMATION

NCBI GI #	114052476
NCBI GeneID	3005
NCBI GenBank Nucleotide #	NP_001040247.1
Molecular Weight	~30kDa
NCBI Official Full Name	histone H1
NCBI Official Synonym Full Names	H1.0 linker histone
NCBI Official Symbol	H1-0
NCBI Official Synonym Symbols	H10; H1.0; H1F0; H1FV
NCBI Protein Information	histone H1.0

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.