

Recombinant Histone H1 (Pan Nuclear Marker) Antibody

Mouse Monoclonal Antibody [Clone rAE-4]

Catalog No	Format	Size
3005-MSM8-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
3005-MSM8-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
3005-MSM8-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

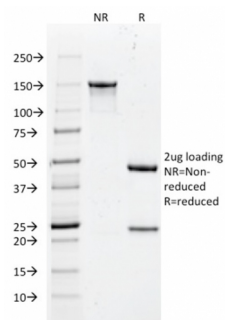
Applications	Tested Dillution	Note
Flow Cytometry (Flow)	1-2ug/million cells	
Immunofluorescence (IF)	1-3ug/ml	
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

Product Details

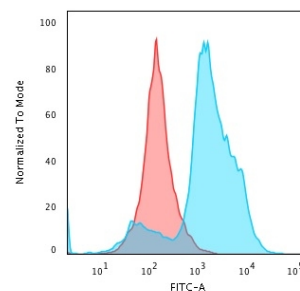
Clone	rAE-4
Gene Name	H1-0, N/A
Immunogen	Recombinant full-length human Histone H1 protein
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG2a / Kappa
Mol. Weight of Antigen	30kDa
Cellular Localization	N/A
Species Reactivity	Human, Mouse, Rat
Positive Control	A-431, HeLa, LNCap or Jurkat cells. Human breast carcinoma. Human heart tissue lysate.

*Optimal dilution for a specific application should be determined.

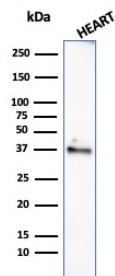
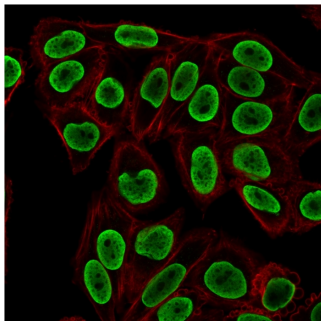
Product Images for Recombinant Histone H1 (Pan Nuclear Marker) Antibody



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

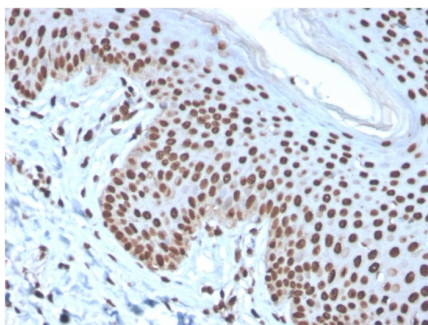


Flow Cytometric Analysis of paraformaldehyde-fixed HeLa cells using Histone H1 Mouse Recombinant Monoclonal Antibody (rAE-4) followed by goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).



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).

Western Blot Analysis of human heart tissue lysate using Histone H1 Mouse Recombinant Monoclonal Antibody (rAE-4).



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

Specificity & Comments

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.

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

Supplied As

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.

Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.