

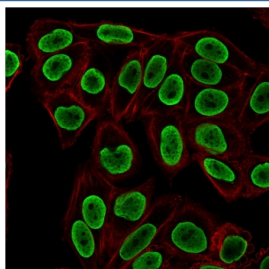
Recombinant Histone H1 Antibody [clone rAE-4] (V7836)

Catalog No.	Formulation	Size
V7836-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7836-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7836SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

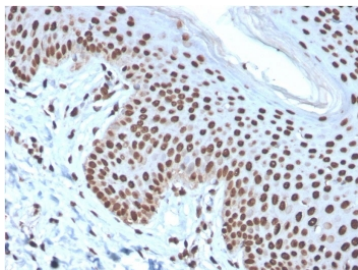
Recombinant **MOUSE MONOCLONAL**

[Bulk quote request](#)

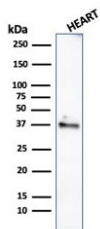
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Purified
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG2a, kappa
Clone Name	rAE-4
Purity	Protein G affinity chromatography
UniProt	P07305
Localization	Nuclear
Applications	Flow Cytometry : 1-2ug/10 ⁶ cells in 0.1ml Immunofluorescence : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml Western Blot : 1-2ug/ml
Limitations	This recombinant Histone H1 antibody is available for research use only.



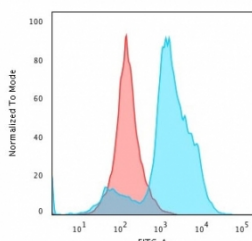
Immunofluorescent staining of PFA-fixed human HeLa cells with recombinant Histone H1 antibody (clone rAE-4, green) and Phalloidin (red).



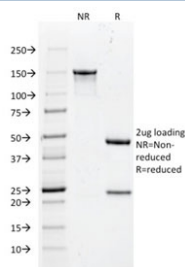
IHC staining of FFPE human skin basal cell carcinoma with recombinant Histone H1 antibody (clone rAE-4). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min and allow to cool before testing.



Western blot testing of human heart lysate with recombinant Histone H1 antibody (clone rAE-4). Predicted molecular weight ~20 kDa but can be observed at 27-33 kDa.



Flow cytometry testing of PFA-fixed human HeLa cells with recombinant Histone H1 antibody (clone rAE-4); Red=isotype control, Blue= recombinant Histone H1 antibody.



SDS-PAGE analysis of purified, BSA-free recombinant Histone H1 antibody (clone rAE-4) as confirmation of integrity and purity.

Description

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, this 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.

Application Notes

Optimal dilution of the recombinant Histone H1 antibody should be determined by the researcher.

Immunogen

Nuclei of human leukemia biopsy cells were used as the immunogen for this recombinant Histone H1 antibody.

Storage

Store the recombinant Histone H1 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).