

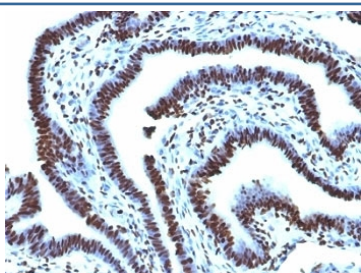
Histone Antibody / Histone H1 [clone AE-4] (V2565)

Catalog No.	Formulation	Size
V2565-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2565-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2565SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2565IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

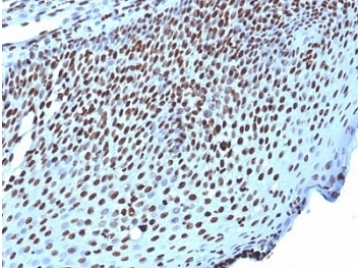
 Citations (10)

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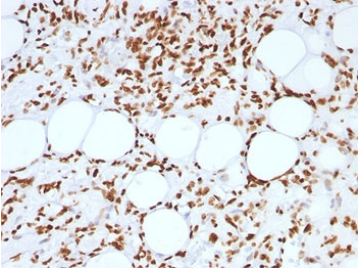
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a, kappa
Clone Name	AE-4
Purity	Protein G affinity chromatography
UniProt	P07305
Localization	Nuclear
Applications	Flow Cytometry : 1-2ug/million cells Immunofluorescence : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT Western Blot : 1-2ug/ml
Limitations	This Histone antibody is available for research use only.



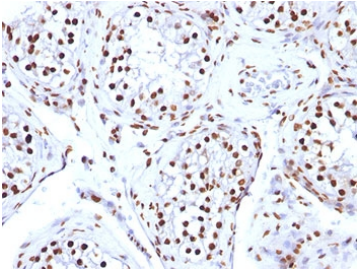
IHC: Formalin-fixed, paraffin-embedded human ovarian carcinoma stained with Histone H1 antibody (AE-4)



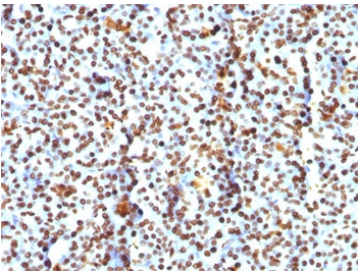
IHC: Formalin-fixed, paraffin-embedded human tonsil stained with Histone antibody (AE-4)



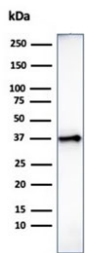
IHC: FFPE human angiosarcoma tested with Histone antibody (AE-4)



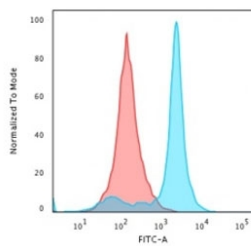
IHC: FFPE human testicular carcinoma tested with Histone antibody (AE-4)



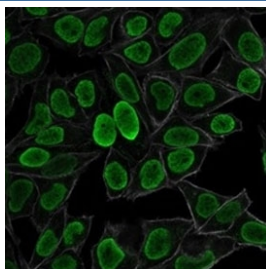
IHC: FFPE human pancreas tested with Histone antibody (AE-4)



Western blot testing of human heart tissue lysate with Histone antibody (clone AE-4).
Observed molecular weight ~22/30-33 kDa (unmodified/modified).



Flow cytometry testing of permeabilized human HeLa cells with Histone antibody (clone AE-4); Red=isotype control, Blue= Histone antibody.



Immunofluorescent staining of PFA-fixed human HeLa cells with Histone antibody (green, clone AE-4) and phalloidin (red).

Description

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. 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.

Application Notes

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

1. Staining of formalin/paraffin tissues requires boiling tissue sections in 10mM Citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 min.
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

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

Storage

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