H3K9ac Monoclonal Antibody (J.924.2)

Product Details	
Size	100 µL
Species Reactivity	Human, Mouse, Non-human primate, Rat, Yeast, Zebrafish
Published Species	Bovine, Human
Host/Isotype	Rabbit / IgG
Class	Monoclonal
Type	Antibody
Clone	J.924.2
Conjugate	Unconjugated
Immunogen	Synthetic peptide corresponding to the amino terminus of histone H3 in which Lys9 is acetylated
Form	Liquid
Purification	Affinity chromatography
Storage buffer	0.01M HEPES, pH 7.5, with 100µg/mL BSA, 0.15M NaCl, 50% glycerol
Contains	<0.02% sodium azide
Storage conditions	-20°C
RRID	AB_10986969

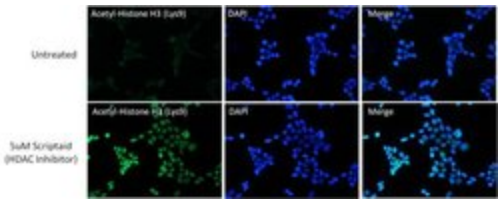
Applications	Tested Dilution	Publications
Western Blot (WB)	1:1,000	1 Publication
Immunohistochemistry (Paraffin) (IHC (P))	1:800	-
Immunocytochemistry (ICC/IF)	1:400	1 Publication
Flow Cytometry (Flow)	1:200	-
Immunoprecipitation (IP)	1:25	-
Miscellaneous PubMed (Misc)	-	1 Publication

Product Specific Information

It is not recommended to aliquot this antibody.

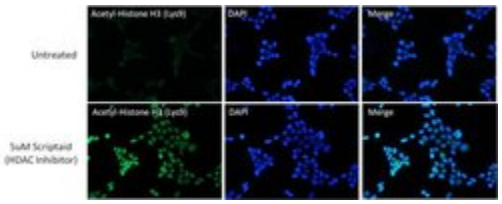
This antibody is not cross-reactive with other acetylated histones.

Advanced Verification Data

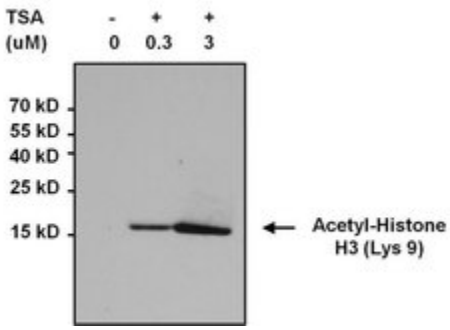


H3K9ac Antibody (MA5-11195)
Modulation of target protein phosphorylation by cell treatment demonstrates antibody specificity. Immunofluorescence analysis of Acetyl-Histone H3 (Lys9) using Acetyl-Histone H3 (Lys9) Antibody (Product # MA5-11195) shows induced expression of Acetyl-Histone H3 (Lys9) in the HEK293T upon Scriptaid (HDAC inhibitor) treatment. Cell treatment validation info.

Product Images For H3K9ac Monoclonal Antibody (J.924.2)



H3K9ac Antibody (MA5-11195) in ICC/IF
Immunofluorescent analysis of acetylated Histone H3 (Lys9, green) in HEK293T cells left untreated (top row) or treated with 5uM of the HDAC inhibitor, Scriptaid (bottom row), for 24 hours. Cells fixed with 4% formaldehyde were permeabilized and blocked with 1X PBS containing 5% BSA and 0.3% Triton X-100 for 1 hour at room temperature. Cells were probed with an Acetyl-Histone H3 (Lys9) monoclonal antibody (Product # MA5-11195) at a dilution of 1:50 overnight at 4°C in 1X PBS containing 1% BSA and 0.3% Triton X-100, washed with 1X PBS, and incubated with a fluorophore-conjugated goat anti-rabbit IgG secondary antibody at a dilution of 1: 200 for 1 hour at room temperature. Nuclei (blue) were stained with DAPI. Images were taken on a Leica DM1000 at 40X magnification. Data courtesy of the Innovators Program.



H3K9ac Antibody (MA5-11195) in WB
Immunoprecipitation of acetylated Histone H3 (Lys9) was performed using whole cell lysates from HeLa cells left untreated (DMSO only) or cells treated with 0.3uM or 3 uM Trichostatin A (TSA) for 16 hours. Antigen-antibody complexes were formed by incubating 500 µg of the indicated lysate with 3 µg of an Acetyl Lysine monoclonal antibody (Product # MA1-2021) overnight on a rocking platform at 4°C. The immune complexes were captured on 50 µL Protein A/G Agarose (Product # 20421), washed extensively, and eluted with 5X Lane Marker Reducing Sample Buffer (Product # 39000). Samples were resolved on a 4-20% Tris-HCl polyacrylamide gel, transferred to a PVDF membrane, and blocked with 5% BSA/TBS-0.1%Tween for at least 1 hour. The membrane was probed with an Acetyl-Histone H3 (Lys9) monoclonal antibody (Product # MA5-11195) at a dilution of 1:1000 overnight rotating at 4°C, washed in TBST, and probed with Clean-blot IP Detection Reagent (Product # 21230) at a dilution of 1:2000 for at least 1 hour. Chemiluminescent detection was performed using SuperSignal West Pico (Product # 34087).

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3 References

Western Blot (1)

Experimental hematology

Compounds targeting class II histone deacetylases do not cause panHDACI-associated impairment of megakaryocyte differentiation.

"MA5-11195 was used in Western Blotting to investigate if targeting members of class II histone deacetylase inhibitors, such as histone deacetylase inhibitors 4,5,6, as cancer therapy, may potentially avoid thrombocytopenia caused by pan histone deacetylase inhibitors."

Authors: Simic D,Sang N

Species
Human

Dilution
Not Cited

Year
2019

Immunocytochemistry (1)

Science advances

Nuclear softening expedites interstitial cell migration in fibrous networks and dense connective tissues.

"MA5-11195 was used in Immunocytochemistry to hypothesize that nuclear stiffness is a limiting factor in migration and posited that repair could be expedited by transiently decreasing nuclear stiffness."

Authors: Heo SJ,Song KH,Thakur S,Miller LM,Cao X,Peredo AP,Seiber BN,Qu F,Driscoll TP,Shenoy VB,Lakadamyali M,Burdick JA,Mauck RL

Species
Bovine

Dilution
1:400

Year
2020

Miscellaneous PubMed (1)

Frontiers in plant science

Cytomixis doesn't induce obvious changes in chromatin modifications and programmed cell death in tobacco male meiocytes.

"MA5-11195 was used in immunocytochemistry to study how chromosomal changes contribute to cytomixis"

Authors: Mursalimov S,Permyakova N,Deineko E,Houben A,Demidov D

Species
Not Applicable

Dilution
1:200

Year
2015