For Research Use Only

## Acetyl-Histone H2A (Lys9) Recombinant antibody, PBS Only (Capture)

Catalog Number:83041-1-PBS



**Basic Information** 

Catalog Number: 83041-1-PBS

GenBank Accession Number:

BC093836

Purification Method: Protein A purification

Size

GeneID (NCBI):

CloneNo.: 230349B1

100ug, Concentration: 1 mg/ml by Nanodrop:

UNIPROT ID:

Source:

P04908

Rabbit

Full Name: histone cluster 1, H2ae

Isotype:

Calculated MW:

14 kDa

Observed MW:

14 kDa

**Applications** 

**Tested Applications:** 

WB, IHC, IF/ICC, Dot Blot, Cytometric bead array,

Indirect ELISA

Species Specificity:

human, mouse

Product Information

83041-1-PBS targets Acetyl-Histone H2A (Lys9) as part of a matched antibody pair:

MP00085-1: 83041-1-PBS capture and 83041-4-PBS detection (validated in Cytometric bead array)

MP00085-2: 83041-1-PBS capture and 83041-3-PBS detection (validated in Cytometric bead array)

 $MP00085\text{-}3:83041\text{-}1\text{-}PBS\ capture\ and}\ 83041\text{-}2\text{-}PBS\ detection}\ (validated\ in\ Cytometric\ bead\ array)$ 

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

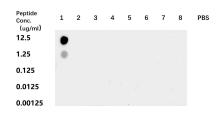
**Background Information** 

Histone H2A is a core component of nucleosome. Histone variants contribute to chromatin complexity by creating specialized nucleosomes. Within nucleosomes, either one canonical H2A or both of them can be exchanged with a particular variant (heterotypic and homotypic nucleosomes, respectively), and such changes can have profound influences on nucleosome stability and biological outcome.

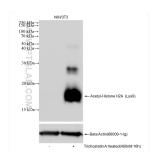
Storage

Storage: Store at -80°C. Storage Buffer: 100% PBS pH 7.3

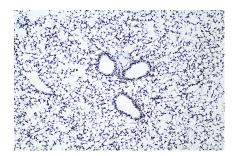
## Selected Validation Data



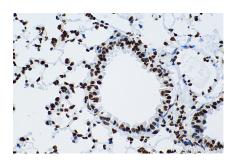
Dot blot analysis was used to confirm the specificity of Acetyl-Histone H2A (Lys9) antibody. Acetylated peptides were spotted onto NC and probed with antibody at 1 µg/ml. The amount of peptide (µg/ml.) spotted is indicated next to each row. Column 1: H2AEK9Ac. Column 2: Unmodified H2AEK9. Column 3: H2AEK5Ac. Column 4: Unmodified H2AEK5. Column 5: H2AEK13Ac. Column 6: Unmodified H2AEK13. Column 7: H2AEK15Ac. Column 8: Unmodified



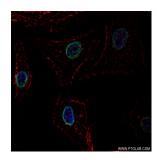
Trichostatin A treated NIH/3T3 cells were subjected to SDS PAGE followed by western blot with 83041-1-RR (Acetyl-Histone H2A (Lys9) antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83041-1-PBS in a different storage buffer formulation.



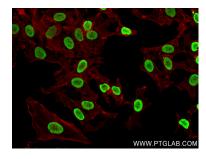
Immunohistochemical analysis of paraffinembedded mouse lung tissue slide using 83041-1-RR (Acetyl-Histone H2A (Lys9) antibody) at dilution 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83041-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded mouse lung tissue slide using 83041-1-RR (Acetyl-Histone H2A (Lys9) antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83041-1-PBS in a different storage buffer formulation.



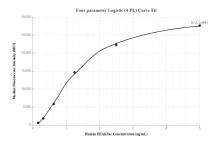
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using Acetyl-Histone H2A (Lys9) antibody (83041-1-RR, Clone: 23034981) at dilution of 1:150 and Coralite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 83041-1-PBS in a different storage buffer formulation.



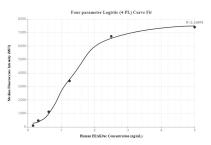
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using Acetyl-Histone H2A (Lys9) antibody (83041-1-RR, Clone: 230349B1) at dilution of 1:400 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 83041-1-PBS in a different storage buffer formulation.



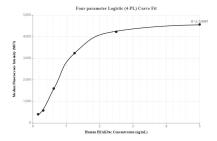
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using Acetyl-Histone H2A (Lys9) antibody (83041-1-RR, Clone: 230349B1) at dilution of 1:400 and Coralite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 83041-1-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP00085-1, HIST1H2AE Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83041-1-PBS. Detection antibody: 83041-4-PBS. Standard: SY02140Ac. Range: 0.156-5 ng/mL



Cytometric bead array standard curve of MP00085-2, HIST 1H2AE Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83041-1-PBS. Detection antibody: 83041-3-PBS. Standard: SY02140Ac. Range: 0.156-5 ng/mL



Cytometric bead array standard curve of MP00085-3, HIST1H2AE Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83041-1-PBS. Detection antibody: 83041-2-PBS. Standard: SY02140Ac. Range: 0.156-5 ng/mL