

For Research Use Only

Histone H3 Monoclonal antibody, PBS Only (Capture)

Catalog Number: 68345-1-PBS



Basic Information

Catalog Number: 68345-1-PBS	GenBank Accession Number: BC066245	Purification Method: Protein A purification
Size: 100ug , Concentration: 1mg/ml by Nanodrop;	GeneID (NCBI): 8350	CloneNo.: 1A2A3
Source: Mouse	UNIPROT ID: P68431	
Isotype: IgG2b	Full Name: histone cluster 1, H3a	
	Observed MW: 15-17 kDa	

Applications

Tested Applications:
WB, IHC, IF/ICC, FC (Intra), IP, Cytometric bead array, Indirect ELISA

Species Specificity:
human, mouse, rat, pig, rabbit, canine, chicken, zebrafish, hamster, dog, wheat

Product Information

68345-1-PBS targets Histone H3 as part of a matched antibody pair:

MP50178-1: 68345-1-PBS capture and 66863-1-PBS detection (validated in Cytometric bead array)

Unconjugated mouse monoclonal antibody pair in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation.

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

Histones are small, highly basic proteins that consist of a globular domain with unstructured N- and C-terminal tails protruding from the main structure. Histone H3 is one of the five main histones that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. Two molecules of each of the four core histones (H2A, H2B, H3, and H4) form an octamer, around which approximately 146 bp of DNA is wrapped in repeating units, called nucleosomes. In addition to their role in DNA compartmentalization, histones also play crucial roles in various biologic processes, including gene expression and regulation, DNA repair, chromatin condensation, cell cycle progression, chromosome segregation, and apoptosis. The ability of histones to regulate chromatin dynamics primarily originates from various posttranslational modifications carried out by histone-modifying enzymes.

Storage

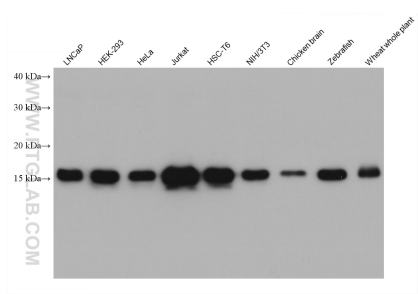
Storage:
Store at -80°C.

Storage Buffer:
PBS only, pH7.3

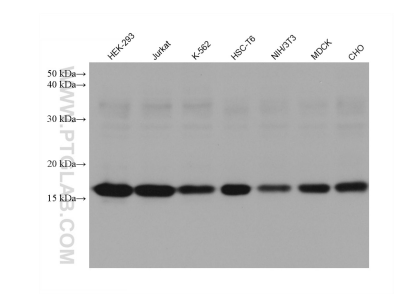
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

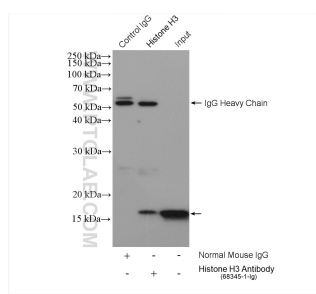
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 68345-1-Ig (HIST1H3A antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 68345-1-PBS in a different storage buffer formulation.



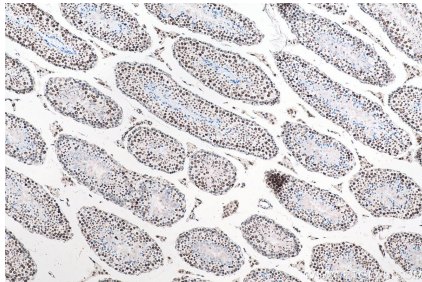
Various lysates were subjected to SDS PAGE followed by western blot with 68345-1-Ig (Histone H3 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 68345-1-PBS in a different storage buffer formulation.



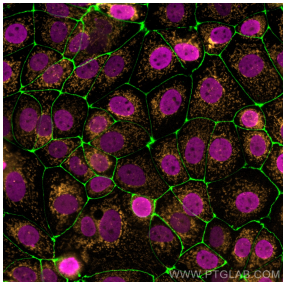
IP result of anti-Histone H3 (IP:68345-1-Ig, 4ug; Detection:68345-1-Ig 1:2000) with HeLa cells lysate 1800 ug. This data was developed using the same antibody clone with 68345-1-PBS in a different storage buffer formulation.



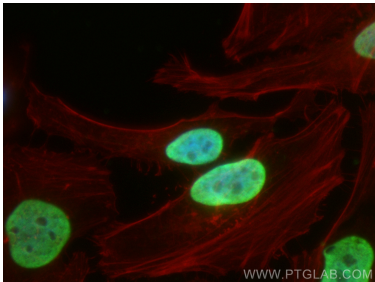
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 68345-1-Ig (Histone H3 antibody) at dilution of 1:2000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 68345-1-PBS in a different storage buffer formulation.



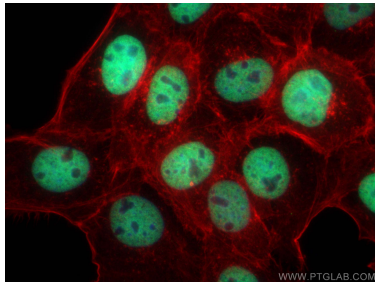
Immunohistochemical analysis of paraffin-embedded mouse testis tissue slide using 68345-1-Ig (HIST1H3A antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 68345-1-PBS in a different storage buffer formulation.



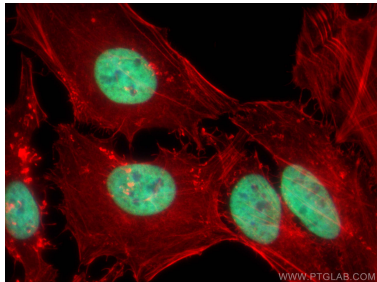
Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using Histone H3 antibody (68345-1-Ig, Clone: 1A2A3, labeled with CoraLite647-conjugated AffiniPure F(ab')2 Fragment Goat Anti-Mouse IgG (H+L), SA00014-10, magenta) at dilution of 1:400 and CoraLite Plus 488-conjugated ZO-1 antibody (CL488-21773, green), CHCHD6 antibody (66597-1-Ig, Clone: 2A11E9, labeled with FlexAble CoraLite Plus 555 Antibody Labeling Kit for Mouse IgG2a, red). This data was developed using the same antibody clone with 68345-1-PBS in a different storage buffer formulation.



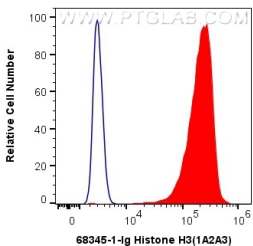
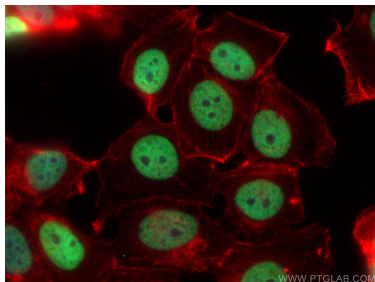
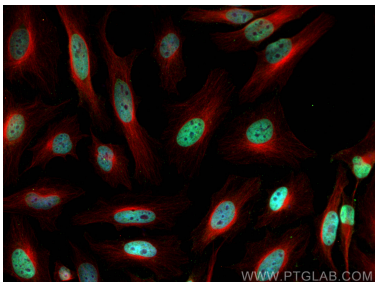
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using Histone H3 antibody (68345-1-Ig, Clone: 1A2A3) at dilution of 1:400 and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-phalloidin (red). This data was developed using the same antibody clone with 68345-1-PBS in a different storage buffer formulation.



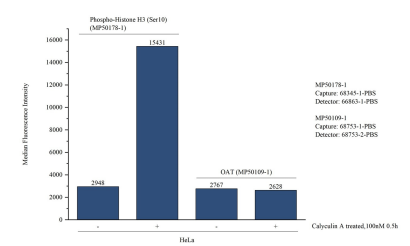
Immunofluorescent analysis of (4% PFA) fixed A431 cells using Histone H3 antibody (68345-1-Ig, Clone: 1A2A3) at dilution of 1:1000 and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-phalloidin (red). This data was developed using the same antibody clone with 68345-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using Histone H3 antibody (68345-1-Ig, Clone: 1A2A3) at dilution of 1:1000 and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-phalloidin (red). This data was developed using the same antibody clone with 68345-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using Histone H3 antibody (68345-1-Ig, Clone: 1A2A3) at dilution of 1:1000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), Alpha Tubulin antibody (11224-1-AP, red). This data was developed using the same antibody clone with 68345-1-PBS in a different



Cytometric bead array in cell lysate using MP50178-1, Phospho-Histone H3 (Ser10) Monoclonal Matched Antibody Pair, PBS Only. Capture antibody: 68345-1-PBS. Detection antibody: 66863-1-PBS. Cell lysate: Non-treated HeLa and Calyculin A treated HeLa (30µg/well). Non-related target OAT Monoclonal Matched Antibody Pair (MP50109-1P) was served as control.

Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using Histone H3 antibody (68345-1-Ig, Clone: 1A2A3) at dilution of 1:1000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-phalloidin (red). This data was developed using the same antibody clone with 68345-1-PBS in a different storage buffer formulation.

1X10⁶ HepG2 cells were intracellularly stained with 0.4 ug Anti-Human Histone H3 (68345-1-Ig, Clone:1A2A3) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Mouse IgG2b Isotype Control (MPC-11) (65128-1-Ig, Clone: MPC-11) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011). This data was developed using the same antibody clone with 68345-1-PBS

