

For Research Use Only



# Phospho-Histone H3 (Ser10) Monoclonal antibody, PBS Only (Detector)

Catalog Number: 66863-1-PBS

## Basic Information

Catalog Number: 66863-1-PBS	GenBank Accession Number: NM_003529	Purification Method: Protein A purification
Concentration: 1000 µg/ml	GeneID (NCBI): 8350	CloneNo.: 4C7G2
Source: Mouse	UNIPROT ID: P68431	
Isotype: IgG1	Full Name: histone cluster 1, H3a	
	Calculated MW: 15 kDa	
	Observed MW: 15-17 kDa	

## Applications

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

**Species Specificity:**  
human, mouse, rat, pig

## Background Information

Phospho-histone-H3 (PHH3) is a core histone protein, which in its phosphorylated state forms the principal constituents of eukaryotic chromatin, with histone H3 being phosphorylated at serine (Ser) 10 or Ser28 as well as its phosphorylation of Ser10 being strongly correlated with the late G2 to M-phase transition in mammalian mitotic cells. On the basis of previous research, a few cell line- and animal model-based researches have displayed an increase in phosphorylation of histone H3 at Ser10 (H3S10ph), the only histone marker that is involved in carcinogenesis and cellular transformation. Histone H3 phosphorylation on serine-10 is specific to mitosis and phosphorylated histone H3 (PHH3) proliferation markers (as counts defined per area or as indices defined per cell numbers) are increasingly being used to evaluate proliferation in various tumors.

## Storage

**Storage:**  
Store at -80°C.  
**The product is shipped with ice packs. Upon receipt, store it immediately at -80°C**

**Storage Buffer:**  
PBS only, pH7.3

For technical support and original validation data for this product please contact:

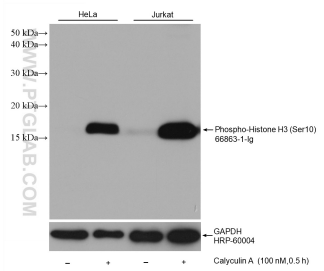
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

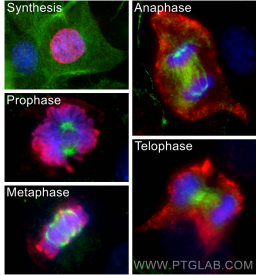
W: [ptgcn.com](http://ptgcn.com)

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

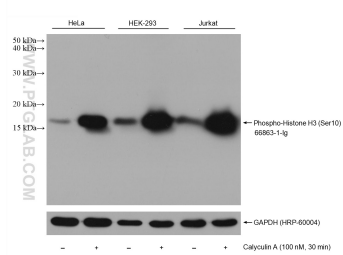
Selected Validation Data



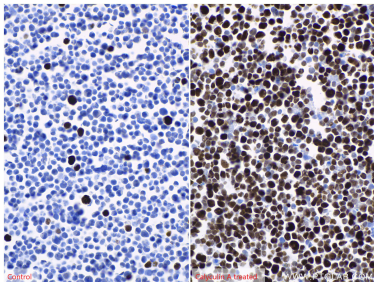
Various lysates were subjected to SDS PAGE followed by western blot with 66863-1-Ig (Phospho-Histone H3 (Ser10) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control. This data was developed using the same antibody clone with 66863-1-PBS in a different storage buffer formulation.



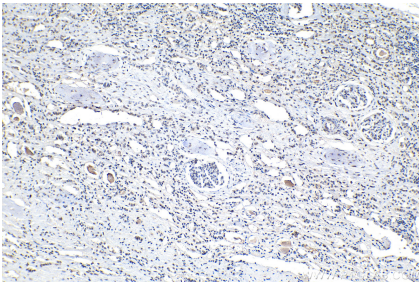
Immunofluorescent analysis of (4% PFA) fixed C2C12 cells using Phospho-Histone H3 (Ser10) antibody (66863-1-Ig, Clone: 4C7G2 ) at dilution of 1:1200 and CoraLite®594-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), Alpha Tubulin antibody (11224-1-AP, green). This data was developed using the same antibody clone with 66863-1-PBS in a different storage buffer formulation.



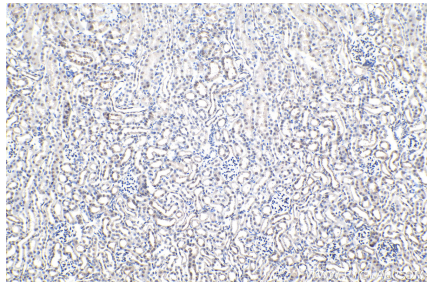
Non-treated and Calyculin A treated cells were subjected to SDS PAGE followed by western blot with 66863-1-Ig (Phospho-Histone H3 (Ser10) antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control. This data was developed using the same antibody clone with 66863-1-PBS in a different storage buffer formulation.



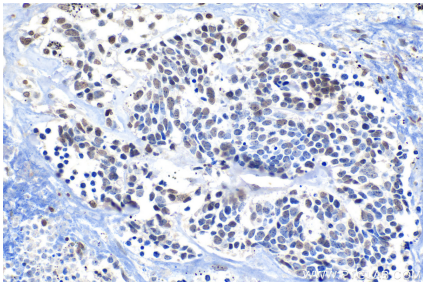
Immunohistochemical analysis of paraffin-embedded Jurkat cells slide using 66863-1-Ig (Phospho-Histone H3 (Ser10) antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66863-1-PBS in a different storage buffer formulation.



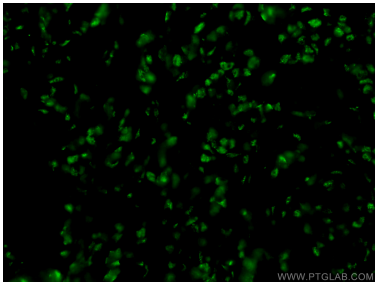
Immunohistochemical analysis of paraffin-embedded human renal cell carcinoma tissue slide using 66863-1-Ig (Phospho-Histone H3 (Ser10) antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66863-1-PBS in a different storage buffer formulation.



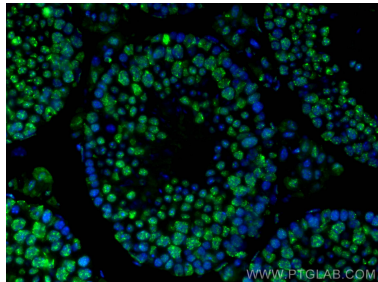
Immunohistochemical analysis of paraffin-embedded mouse kidney tissue slide using 66863-1-Ig (Phospho-Histone H3 (Ser10) antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66863-1-PBS in a different storage buffer formulation.



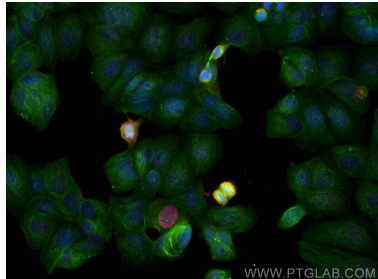
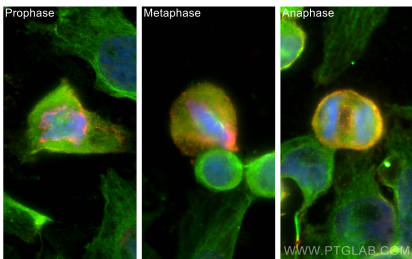
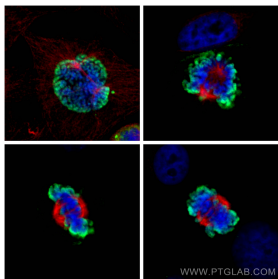
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 66863-1-Ig (Phospho-Histone H3 (Ser10) antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66863-1-PBS in a different storage buffer formulation.



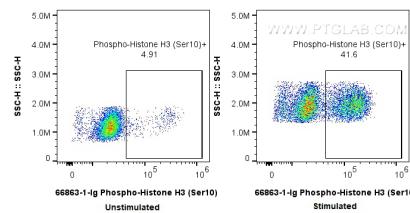
Immunofluorescent analysis of (4% PFA) fixed human breast cancer tissue using 66863-1-Ig (PHH3 antibody) at dilution of 1:100 and CoraLite488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 66863-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed mouse testis tissue using Phospho-Histone H3 (Ser10) antibody (66863-1-Ig, Clone: 4C7G2 ) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 66863-1-PBS in a different storage buffer formulation.

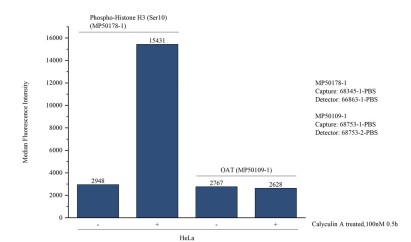


Immunofluorescent analysis of (4% PFA) fixed HeLa cells using Phospho-Histone H3 (Ser10) antibody (66863-1-Ig, Clone: 4C7G2 ) at dilution of 1:1000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) (SA00013-1), Beta Tubulin antibody (80713-1-RR, Clone: 2O13, red). This data was developed using the same antibody



1x10<sup>6</sup> nocodazole treated HeLa cells were intracellularly stained with 0.25 ug Phospho-Histone H3 (Ser10) Monoclonal antibody (66863-1-Ig, Clone:4C7G2) and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1), and 0.25 ug Mouse IgG1 isotype control Mouse McAb (66360-1-Ig, Clone: 1F8D3). Cells were fixed with 4% PFA and permeabilized with 90% MeOH. This data was developed using the same antibody clone with 66863-1-PBS in a different storage buffer

Immunofluorescent analysis of (4% PFA) fixed HeLa cells using Phospho-Histone H3 (Ser10) antibody (66863-1-Ig, Clone: 4C7G2 ) at dilution of 1:1500 and CoraLite®594-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), Alpha Tubulin antibody (11224-1-AP, green). This data was developed using the same antibody clone with 66863-1-PBS in



Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using Phospho-Histone H3 (Ser10) antibody (66863-1-Ig, Clone: 4C7G2 ) at dilution of 1:1500 and CoraLite®594-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), Alpha Tubulin antibody (11224-1-AP, green). This data was developed using the same antibody clone with 66863-1-PBS in a different storage buffer formulation.

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 (30  $\mu$ g/well). Non-related target OAT Monoclonal Matched Antibody Pair (MP50109-1P) was served as control.