For Research Use Only

## Phospho-Histone H<sub>3</sub> (Ser<sub>10</sub>) Recombinant antibody, PBS Only

Catalog Number:82828-10-PBS



**Basic Information** 

Catalog Number: 82828-10-PBS

GenBank Accession Number:

Protein A purification

Size:

NM\_003529 GeneID (NCBI):

CloneNo.: 242921B1

**Purification Method:** 

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

8350 **UNIPROT ID:** 

Source:

P68431

Rabbit

Full Name:

Isotype: IgG

histone cluster 1, H3a

Calculated MW:

15 kDa

Observed MW:

15 kDa

**Applications** 

**Tested Applications:** 

WB, IF/ICC, Indirect ELISA

Species Specificity:

human, mouse, rat

## **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  $phosphory lation\ of\ Ser 10\ being\ strongly\ correlated\ with\ the\ late\ G2\ to\ M-phase\ transition\ in\ mammalian\ mitotic$ 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

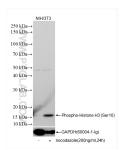
Storage:

Store at -80°C.

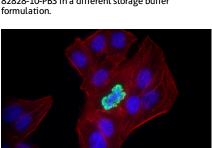
Storage Buffer:

PBS only, pH7.3

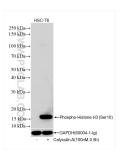
## **Selected Validation Data**



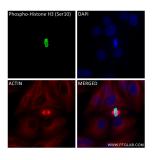
Nocodazole treated and untreated NIH/3T3 cells were subjected to SDS PAGE followed by western blot with 82828-10-RR (Phospho-Histone H3 (Ser10) antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with GAPDH Monoclonal antibody (60004-1-lg) as loading control. This data was developed using the same antibody clone with 82828-10-PBS in a different storage buffer



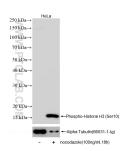
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using Phospho-Histone H3 (Ser10) antibody (82828-10-RR, Clone: 242921B1) at dilution of 1:800 and Coralite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 82828-10-PBS in a different storage buffer formulation.



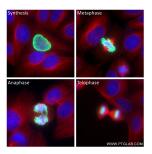
Calyculin A treated and untreated HSC-T6 cells were subjected to SDS PAGE followed by western blot with 82828-10-RR (Phospho-Histone H3 (Ser10) antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with GAPDH Monoclonal antibody (60004-1-lg) as loading control. This data was developed using the same antibody clone with 82828-10-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using Phospho-Histone H3 (Ser10) antibody (82828-10-RR, Clone: 242921B1) at dilution of 1:800 and Coralite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), Beta Tubulin antibody (66240-1-Ig, Clone: 1D4A4, red). This data was developed using the same antibody clone with 82828-10-PBS in a different storage buffer formulation.



Nocodazole treated HeLa cells were subjected to SDS PAGE followed by western blot with 82828-10-RR (Phospho-Histone H3 (Ser10) antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with Alpha Tubulin Monoclonal antibody (66031-1-lg) as loading control. This data was developed using the same antibody clone with 82828-10-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using Phospho-Histone H3 (Ser10) antibody (82828-10-RR, Clone: 242921B1) at dilution of 1:800 and Coralite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), Beta Tubulin antibody (66240-1-Ig, Clone: 1D4A4, red). This data was developed using the same antibody clone with 82828-10-PBS in a different storage buffer formulation.