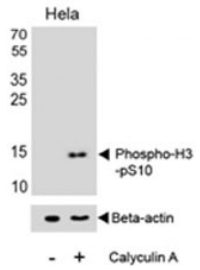
Phospho-Histone H3 Antibody (pS10) / Western Blot Phosphorylation Response Antibody (F48401)

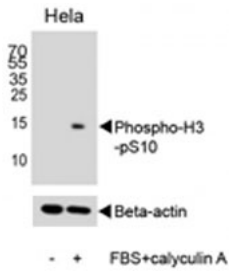
Catalog No.	Formulation	Size
F48401-0.2ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.2 ml
F48401-0.05ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.05 ml

Bulk quote request

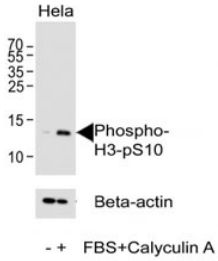
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	P68431
Applications	Western blot: 1:500-4000 Immunohistochemistry (FFPE): 1:-50-1:100 Immunofluorescence: 1:25 Dot blot: 1:500
Limitations	This phospho-Histone H3 antibody is available for research use only.



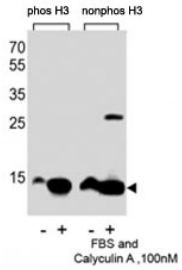
Western blot analysis of lysate from HeLa cell line, untreated or treated with Calyculin A (100ng/ml), using Phospho-Histone H3 Antibody (pS10) / Western Blot Phosphorylation Response Antibody.



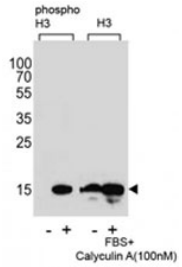
Western blot analysis of lysate from HeLa cell line, untreated or treated with FBS + Calyculin A (100ng/ml), using phospho-Histone H3 antibody



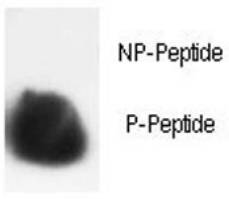
Western blot analysis of lysate from HeLa cell line using phospho-Histone H3 antibody at 1:1000.



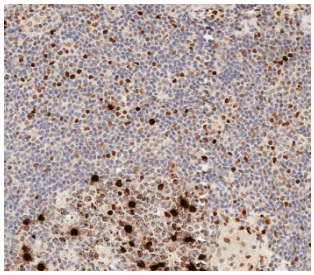
Western blot analysis of extracts from HeLa cells, untreated or treated with FBS + Calyculin A (100nM), using phospho-Histone H3 antibody (left) or nonphos Ab (right).



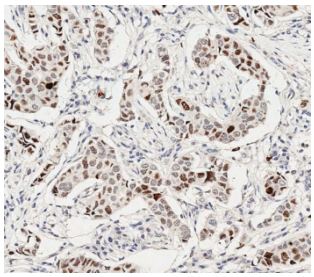
Phospho-Histone H3 Antibody (pS10) / Western Blot Phosphorylation Response Antibody for WB. Western blot analysis of HIST1H3A / Histone H3 Ser10 phosphorylation in human HeLa cell extracts untreated (-) or treated (+) with FBS and Calyculin A (100 nM) using Phospho-Histone H3 Antibody (pS10) / Western Blot Phosphorylation Response Antibody (left) compared to a non-phospho Histone H3 antibody (right). A band is detected at the predicted molecular weight of approximately 15 kDa corresponding to Histone H3, with increased signal intensity in treated samples reflecting enhanced Ser10 phosphorylation. The non-phospho antibody detects total Histone H3 with relatively consistent band intensity across conditions, confirming phosphorylation-dependent signal specificity.



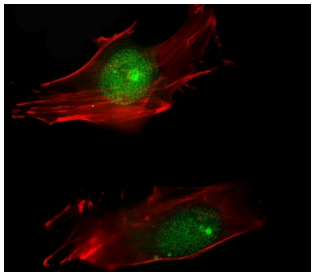
Dot blot analysis of phospho-Histone H3 antibody. 50ng of phos-peptide or nonphos-peptide per dot were spotted.



IHC staining of FFPE human tonsil with phospho-Histone H3 antibody (pS10). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human breast cancer with phospho-Histone H3 antibody. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



Immunofluorescent staining of PFA fixed and permeabilized human HeLa cells with phospho-Histone H3 antibody (green) and Phalloidin (red).

Description

Histone H3 (HIST1H3A) is a fundamental chromatin protein whose phosphorylation at serine 10 is a well-established indicator of mitotic progression. Phospho-Histone H3 Antibody (pS10) / Western Blot Phosphorylation Response Antibody is specifically designed for experimental systems requiring strong biochemical validation of phosphorylation-dependent changes. This antibody is part of a broader collection of Histone H3 antibodies used to study chromatin structure, histone modifications, and epigenetic regulation.

HIST1H3A antibody, also referred to as Histone H3 antibody and phospho-H3 Ser10 antibody in the literature, targets a phosphorylation event that is tightly regulated and strongly induced during mitosis. This modification is minimal in non-dividing cells and increases markedly in response to mitotic activation, providing a clear biochemical readout of cell cycle state.

This Phospho-Histone H3 Antibody (pS10) is uniquely positioned for western blot-based phosphorylation analysis, with a strong emphasis on treated versus untreated comparisons. Experimental conditions that promote mitotic entry or arrest result in pronounced increases in signal intensity, enabling direct visualization of phosphorylation dynamics across multiple samples.

The antibody consistently detects a Histone H3 band whose intensity correlates with mitotic activity, supporting reliable interpretation of phosphorylation status. The availability of multiple treated and untreated validation images reinforces its utility for experimental design, particularly in studies requiring clear demonstration of phosphorylation-dependent regulation.

In addition to biochemical assays, immunofluorescence applications show nuclear localization of phospho-Histone H3 within condensed chromatin of mitotic cells, providing complementary morphological context. This dual capability supports integration of biochemical and imaging data in studies of cell division.

Ser10 phosphorylation is mediated by Aurora kinases and plays a direct role in chromatin condensation and recruitment of regulatory factors. Its rapid induction and turnover make it a highly responsive marker for monitoring mitotic signaling and cell cycle transitions.

This antigen affinity purified antibody supports robust detection of phosphorylation changes in experimental systems, making it particularly well suited for studies requiring strong western blot validation of mitotic activity.

Application Notes

Titration of the Phospho-Histone H3 Antibody (pS10) / Western Blot Phosphorylation Response Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

This Phospho-Histone H3 Antibody (pS10) / Western Blot Phosphorylation Response Antibody was produced from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding pS10 of human HIST1H3A.

Storage

Aliquot the phospho-Histone H3 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

Histone H3 Ser10 phospho antibody, H3S10ph western blot antibody, phospho-H3 phosphorylation assay antibody, Histone H3 Ser10 WB antibody

Copyright © NSJ Bioreagents. All rights reserved.