

Alexa Fluor[®] 594 anti-Histone H3 Phospho (Ser10) Antibody

Catalog# / Size	650809 / 25 µg 650810 / 100 µg
Clone	11D8
Regulatory Status	RUO
Other Names	Histone-H3, H3
Isotype	Mouse IgG2b, κ
Description	Histone H3 is phosphorylated at serine 10 during mitosis and is found to be involved in transcriptional activation, chromatin decondensation, and chromosome compaction during cell division, by the action of Aurora kinase and NIMA kinases.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Modified synthetic peptide conjugated to KLH
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor [®] 594 under optimal conditions.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	ICC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by immunocytochemistry. For immunocytochemistry, a concentration range of 2 - 5 µg/ml is recommended. It is recommended that the reagent be titrated for optimal performance for each application. Alexa Fluor [®] and Pacific Blue™ are trademarks of Life Technologies Corporation. View full statement regarding label licenses
Application Notes	The histone H3 pS10 antibody recognizes phosphorylation of human H3 protein at Ser10 residue and has been shown to be useful for Western blotting.
RRID	AB_2801122 (BioLegend Cat. No. 650809) AB_2801123 (BioLegend Cat. No. 650810)

Antigen Details

Structure	H3 is part of the nucleosome, comprised of an octameric complex with H2A, H2B, and H4 proteins.
Distribution	Nucleus
Function	H3 is a core component of the nucleosome that serves to wrap and compact DNA into chromatin. Histones, therefore, limit the accessibility of DNA, providing mechanisms for transcription regulation, DNA repair and replication, and chromosomal stability.
Interaction	Two molecules of H3 form a heterotetramer with two molecules of H4.

Biology Area	Cell Biology, Chromatin Remodeling/Epigenetics, DNA Repair/Replication, Transcription Factors
Molecular Family	Phospho-Proteins
Antigen References	<ol style="list-style-type: none"> 1. Choi HS, <i>et al.</i> 2005. <i>J. Biol. Chem.</i> 280:13545. 2. Goto H, <i>et al.</i> 2002. <i>Genes Cells</i> 7:11. 3. Garcia BA, <i>et al.</i> 2005. <i>Biochemistry</i> 44:13202. 4. Hans F, <i>et al.</i> 2001. <i>Oncogene</i> 20:3021.
Regulation	H3 is regulated by acetylation, methylation, citrullination, phosphorylation, and ubiquitination.
Gene ID	8290

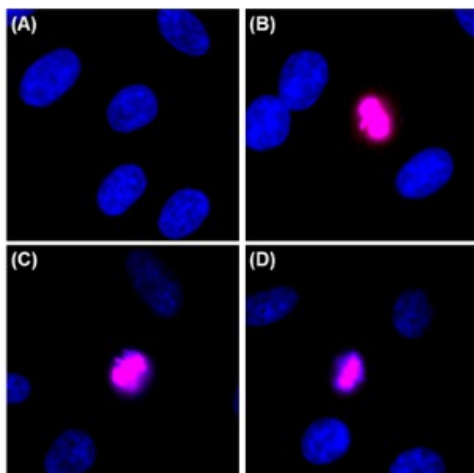
Related Protocols

[Intracellular Flow Cytometry Staining Protocol](#)

Other Formats

PE anti-Histone H3 Phospho (Ser10), Purified anti-Histone H3 Phospho (Ser10), Alexa Fluor® 488 anti-Histone H3 Phospho (Ser10), Alexa Fluor® 647 anti-Histone H3 Phospho (Ser10), Alexa Fluor® 594 anti-Histone H3 Phospho (Ser10)

Product Data



HeLa cells were fixed with 4% paraformaldehyde (PFA) for 15 minutes, permeabilized with 0.5% Triton X-100 for 3 minutes, and blocked with 5% FBS for 60 minutes. Then the cells were intracellularly stained with (A) Alexa Fluor® 594 Mouse IgG2b, κ Isotype Ctrl Antibody (Negative, Cat. No. 400362) or (B-D) Alexa Fluor® 594 Histone H3 Phospho (Ser10) Antibody (Clone 11D8) overnight at 4°C. Nuclei were counterstained with DAPI (Blue, Cat. No. 422801). The image was captured with a 60X objective using KEYENCE BZ-X700 fluorescence microscope. Exposure time (Seconds) for (A-D) is 1/400. Concentrations for (A-B) is 2 $\mu\text{g/ml}$ (1:250 dilution), (C) is 0.5 $\mu\text{g/ml}$ (1:1000 dilution) and (D) is 0.1 $\mu\text{g/ml}$ (1:5000 dilution).

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