

Alexa Fluor[®] 488 anti-Histone H3 Phospho (Ser10) Antibody

Catalog# / Size	650803 / 25 tests 650804 / 100 tests
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 and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor [®] 488 under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
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	ICFC - Quality tested
Recommended Usage	<p>Each lot of this antibody is quality control tested by immunofluorescent intracellular staining with flow cytometric analysis. Please follow the Cell Fixation and Permeabilization Protocol Using 70% Ethanol. For flow cytometric staining, the suggested use of this reagent is 5 μl per million cells. It is recommended that the reagent be titrated for optimal performance for each application.</p> <p>* Alexa Fluor[®] 488 has a maximum emission of 519 nm when it is excited at 488 nm.</p> <p>Alexa Fluor[®] and Pacific Blue™ are trademarks of Life Technologies Corporation.</p> <p>View full statement regarding label licenses</p>
Excitation Laser	Blue Laser (488 nm)
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.
Product Citations	<ol style="list-style-type: none">1. Caiazza F, <i>et al.</i> 2019. Am J Pathol. 189:1916. PubMed2. Jackson TR, <i>et al.</i> 2022. iScience. 25:104787. PubMed3. Chou DB, <i>et al.</i> 2022. Nat Commun. 13:6021. PubMed4. Frendo-Cumbo S, <i>et al.</i> 2022. iScience. 25:105188. PubMed5. Amar-Schwartz A, <i>et al.</i> 2022. Elife. 11:.. PubMed
RRID	AB_10917386 (BioLegend Cat. No. 650803) AB_10918435 (BioLegend Cat. No. 650804)

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

[Surface and Intracellular Cytokine Staining for Flow Cytometry - Video](#)

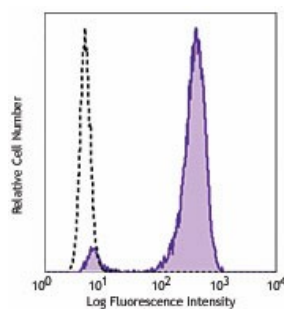
[Cell Fixation and Permeabilization Protocol using 70% Ethanol](#)

[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 treated with 20 μ M of Nocodazole for 24 hours then fixed, permeabilized with 70% ethanol, and then stained with anti-Histone H3 Phospho-Ser10 (clone 11D8) Alexa Fluor® 488 or mouse IgG2b, κ Alexa Fluor® 488 isotype control.

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