

## PE anti-Histone H3 Phospho (Ser10) Antibody

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| <b>Catalog# / Size</b>   | 650807 / 25 tests<br>650808 / 100 tests  |
| <b>Clone</b>             | 11D8   |
| <b>Regulatory Status</b> | RUO  |
| <b>Other Names</b>       | Histone-H3, H3   |
| <b>Isotype</b>           | Mouse IgG2b, κ   |
| <b>Description</b>       | 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

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| <b>Verified Reactivity</b>    | Human  |
| <b>Antibody Type</b>          | Monoclonal   |
| <b>Host Species</b>           | Mouse  |
| <b>Immunogen</b>              | Modified synthetic peptide conjugated to KLH   |
| <b>Formulation</b>            | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)  |
| <b>Preparation</b>            | The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions.  |
| <b>Concentration</b>          | Lot-specific (to obtain lot-specific concentration, please enter the lot number in our <a href="#">Concentration and Expiration Lookup</a> or <a href="#">Certificate of Analysis</a> online tools.)   |
| <b>Storage &amp; Handling</b> | The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>  |
| <b>Application</b>            | <a href="#">ICFC - Quality tested</a>  |
| <b>Recommended Usage</b>      | Each lot of this antibody is quality control tested by <a href="#">intracellular immunofluorescent staining with flow cytometric analysis</a> . For flow cytometric staining, the suggested use of this reagent is 5 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood. |
| <b>Excitation Laser</b>       | Blue Laser (488 nm)<br>Green Laser (532 nm)/Yellow-Green Laser (561 nm)  |
| <b>Application Notes</b>      | The histone H3 pS10 antibody recognizes phosphorylation of human H3 protein at Ser10 residue and has been shown to be useful for Western blotting.   |
| <b>Product Citations</b>      | <ol style="list-style-type: none"><li>1. Garcia-Fabiani MB, <i>et al.</i> 2020. STAR Protoc. :1. <a href="#">PubMed</a></li><li>2. Gao H, <i>et al.</i> 2021. Cells. 10:. <a href="#">PubMed</a></li><li>3. Jin J, <i>et al.</i> 2018. Neoplasia. 20:478. <a href="#">PubMed</a></li></ol>             |
| <b>RRID</b>                   | AB_2564562 (BioLegend Cat. No. 650807)<br>AB_2564563 (BioLegend Cat. No. 650808)   |

### Antigen Details

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|---------------------|---|
| <b>Structure</b>    | H3 is part of the nucleosome, comprised of an octameric complex with H2A, H2B, and H4 proteins. |
| <b>Distribution</b> | Nucleus   |
| <b>Function</b>     | 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.

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|---------------------------|--|
| <b>Interaction</b>        | Two molecules of H3 form a heterotetramer with two molecules of H4.  |
| <b>Biology Area</b>       | Cell Biology, Chromatin Remodeling/Epigenetics, DNA Repair/Replication, Transcription Factors  |
| <b>Molecular Family</b>   | Phospho-Proteins   |
| <b>Antigen References</b> | <ol style="list-style-type: none"><li>1. Choi HS, <i>et al.</i> 2005. <i>J. Biol. Chem.</i> 280:13545.</li><li>2. Goto H, <i>et al.</i> 2002. <i>Genes Cells</i> 7:11.</li><li>3. Garcia BA, <i>et al.</i> 2005. <i>Biochemistry</i> 44:13202.</li><li>4. Hans F, <i>et al.</i> 2001. <i>Oncogene</i> 20:3021.</li></ol> |
| <b>Regulation</b>         | H3 is regulated by acetylation, methylation, citrullination, phosphorylation, and ubiquitination.  |
| <b>Gene ID</b>            | <a href="#">8290</a>   |

## Related Protocols

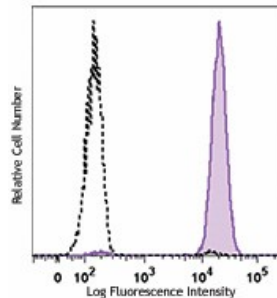
[Surface and Intracellular Cytokine Staining for Flow Cytometry - Video](#)

[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  $\mu$ M of Nocodazole for 24 hours, then fixed and permeabilized with 70% ethanol, and then stained with Histone H3 Phospho-Ser10 (clone 11D8) PE (filled histogram) or mouse IgG2b,  $\kappa$  PE isotype control (open histogram).

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