

## Direct-Blot™ HRP anti-Histone H3 Phospho (Ser28) Antibody

<b>Catalog# / Size</b>	641017 / 25 µL 641018 / 100 µL
<b>Clone</b>	HTA28
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Histone-H3
<b>Isotype</b>	Rat IgG2a, κ
<b>Description</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. During mitosis, H3 is phosphorylated at serine 28. This phosphorylation coincides with chromosome condensation initiated at prophase and disappears at late anaphase. H3 has been demonstrated to be phosphorylated by the action of MLTK-α (mixed lineage kinase-like mitogen activated protein triple kinase α) in response to ultraviolet B light and epidermal growth factor, as well as Aurora-B during mitosis.

### Product Details

---

<b>Verified Reactivity</b>	Human
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Rat
<b>Immunogen</b>	Synthetic peptide phosphorylated at serine 28 conjugated to KLH.
<b>Formulation</b>	This antibody is provided in 50% glycerol in aqueous buffered solutions with preservatives.
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with HRP 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>	Upon receipt, the antibody solution should be stored undiluted at -20°C, and protected from prolonged exposure to light.
<b>Application</b>	<a href="#">WB - Quality tested</a>
<b>Application Notes</b>	This clone is not recommended for CHIP (Chromatin Immunoprecipitation) assays (as determined by in-house testing).
<b>Application References</b>	<ol style="list-style-type: none"><li>1. Hirata A, et al. 2004. <i>J. Histochem. Cytochem.</i> 52:1503.</li><li>2. Goto H, et al. 1999. <i>J. Biol. Chem.</i> 274:25543.</li><li>3. Ozawa K. 2008. <i>Cytometry A</i> 73:517.</li><li>4. Goode NJ, et al. 2014. <i>PLoS Genet.</i> 10:1004323. <a href="#">PubMed</a></li></ol>
<b>RRID</b>	AB_2783362 (BioLegend Cat. No. 641017) AB_2783363 (BioLegend Cat. No. 641018)

### Antigen Details

---

<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.

<b>Interaction</b>	Two molecules of H3 form a heterotetramer with two molecules of H4.
<b>Biology Area</b>	Cell Biology, DNA Repair/Replication, Transcription Factors
<b>Molecular Family</b>	Phospho-Proteins
<b>Antigen References</b>	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.
<b>Regulation</b>	H3 is regulated by acetylation, methylation, citrullination, phosphorylation, and ubiquitination.
<b>Gene ID</b>	<a href="#">8290</a>

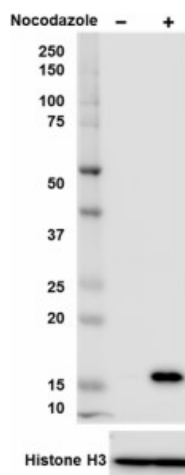
## Related Protocols

[Western Blotting Protocol](#)

## Other Formats

Purified anti-Histone H3-Phosphorylated (Ser28), Alexa Fluor® 488 anti-Histone H3-Phosphorylated (Ser28), Alexa Fluor® 647 anti-Histone H3-Phosphorylated (Ser28), Purified anti-Histone H3-Phosphorylated (Ser28) (Maxpar® Ready), PE anti-Histone H3-Phosphorylated (Ser28), PE/Cyanine7 anti-Histone H3-Phosphorylated (Ser28), PerCP/Cyanine5.5 anti-Histone H3-Phosphorylated (Ser28), Alexa Fluor® 594 anti-Histone H3-Phosphorylated (Ser28), Direct-Blot™ HRP anti-Histone H3 Phospho (Ser28)

## Product Data



Western blot analysis of 15µg cell lysates from HeLa with or without 100 ng/mL Nocodazole treatment for 4 hours. Samples were resolved by electrophoresis (14% Tris Glycine gel), transferred to nitrocellulose, probed with 0.25 µg/mL Direct-Blot™ anti-Histone H3-Phosphorylated (Ser28) Antibody, clone HTA28. Go-ChIP-Grade™ Purified anti-Histone H3 (C-terminus) Antibody (Cat. No. 819404) was used as the loading control. Western-Ready™ ECL Substrate Kit (Cat. No. 426303) was used for developing.

For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.

\*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, [www.biolegend.com/ordering#license](http://www.biolegend.com/ordering#license)). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

BioLegend Inc., 8999 BioLegend Way, San Diego, CA 92121 [www.biolegend.com](http://www.biolegend.com)  
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587