# Product Datasheet

## Histone H3 [p Ser10] Antibody
## NBP2-59167

Unit Size: 100 ul

Store at -20C. Avoid freeze-thaw cycles.

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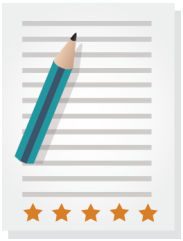


# NBP2-59167

Histone H3 [p Ser10] Antibody

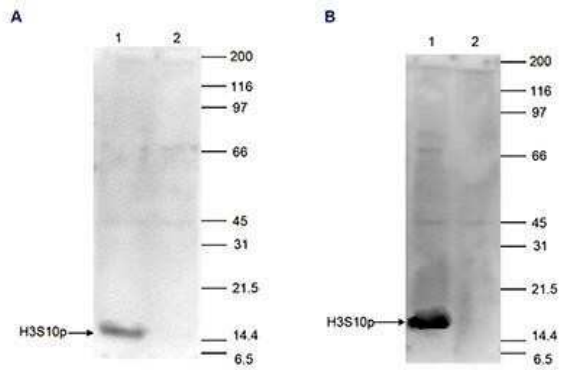
| Product Information | |
|---|---|
| **Unit Size** | 100 ul |
| **Concentration** | Please see the vial label for concentration. If unlisted please contact technical services. |
| **Storage** | Store at -20C. Avoid freeze-thaw cycles. |
| **Clonality** | Polyclonal |
| **Preservative** | 0.05% Sodium Azide |
| **Isotype** | IgG |
| **Purity** | Whole Antiserum |
| **Buffer** | Serum |
| **Target Molecular Weight** | 15 kDa |

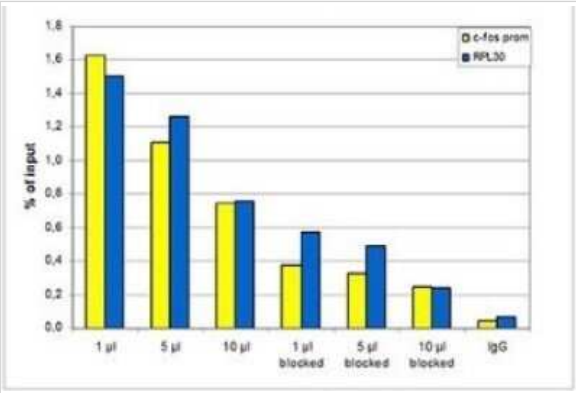
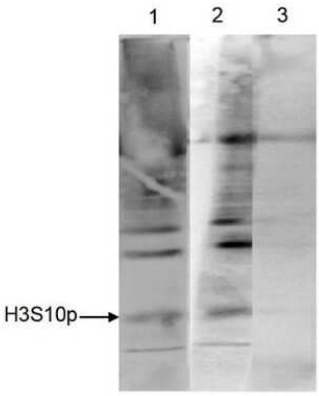
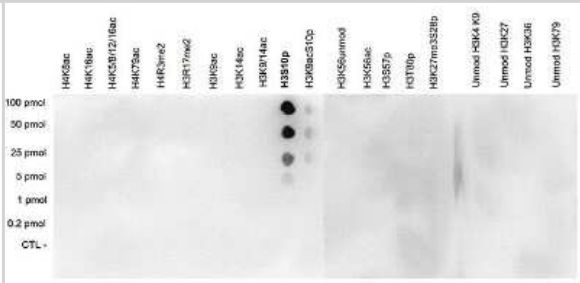
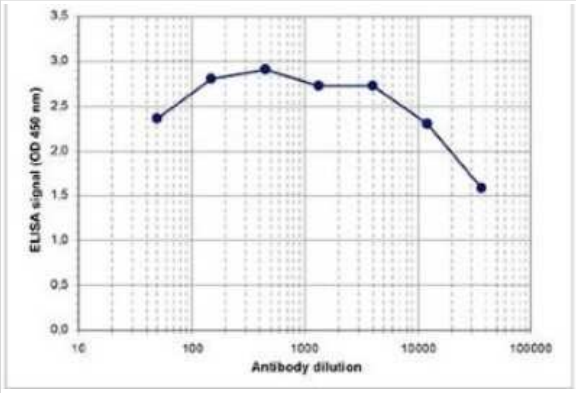
| Product Description | |
|---|---|
| **Host** | Rabbit |
| **Gene ID** | 126961 |
| **Gene Symbol** | H3C14 |
| **Species** | Human |
| **Immunogen** | The exact sequence of the immunogen to this Histone H3 [p Ser10] antibody is proprietary. |

| Product Application Details | |
|---|---|
| **Applications** | Western Blot, Chromatin Immunoprecipitation, Dot Blot, ELISA, Immunocytochemistry/ Immunofluorescence, Immunoprecipitation, Immunofluorescence |
| **Recommended Dilutions** | Western Blot 1:500, Chromatin Immunoprecipitation 1 uL/IP, ELISA 1:1000 - 1:5000, Immunocytochemistry/ Immunofluorescence 1:200, Immunoprecipitation 5 uL/IP, Dot Blot 1:20000, Immunofluorescence 1:200 |

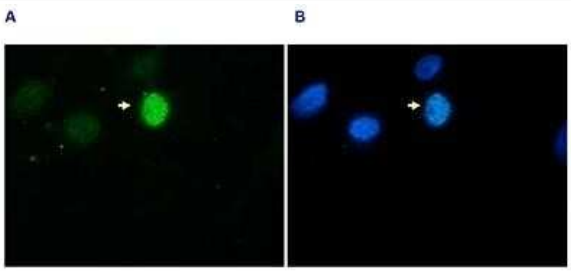
## Images

Western Blot: Histone H3 [p Ser10] Antibody [NBP2-59167] - HeLa cells were treated with TSA (Figure A) or with colcemid (FigureB), and 15 ug of histone extracts of these cells were analysed by Western blot using the antibody against H3S10p diluted 1:500 in TBS-Tween containing 5% skimmed milk. The position of the protein of interest is indicated on the left; the marker (kDa) is shown on the right. The result of the Western analysis with the antibody is shown in lane 1; lane 2 shows the same analysis after incubation of the antibody with 750 pmol blocking peptide for 1 hour at room temperature.



| | |
|---|---|
| Chromatin Immunoprecipitation: Histone H3 [p Ser10] Antibody [NBP2-59167] - ChIP assays were performed using human HeLa cells treated with colcemid, the antibody against H3S10p and optimized PCR primer sets for qPCR. ChIP was performed using sheared chromatin from 10,000 cells. A titration of the antibody consisting of 1, 5, and 10 ul per ChIP experiment was analysed. Additionally, ChIP was performed after incubation of the antibody with 5 nmol blocking peptide for 1 hour at room temperature. IgG (5 ug/IP) was used as negative IP control. QPCR was performed with primers for the promoter of the active genes c-fos and RPL30. Figure shows the recovery, expressed as a % of input (the relative amount of immunoprecipitated DNA compared to input DNA after qPCR analysis). |  |
| Immunoprecipitation: Histone H3 [p Ser10] Antibody [NBP2-59167] - HeLa cells were treated with colcemid to block the cell cycle in metaphase and were fixed with formaldehyde. Chromatin from 10,000 cells was sheared and used for immunoprecipitation (IP). IP was performed with 5 uL of the antibody against H3S10p. The immunoprecipitated proteins were analysed by Western blot with the antibody diluted 1:500 in TBS-Tween containing 5% skimmed milk. Lane 1 shows the result of the IP; a positive control (sheared chromatin from 10,000 cells) and a negative IP control (no antibody added) are shown in lane 2 and 3, respectively. |  |
| Dot Blot: Histone H3 [p Ser10] Antibody [NBP2-59167] - A Dot Blot analysis was performed to test the cross reactivity of the antibody against H3S10p with peptides containing other modifications of histone H3 and H4 and with peptides containing unmodified sequences from histone H3. One hundred to 0.2 pmol of the peptide containing the respective histone modification were spotted on a membrane. The antibody was used at a dilution of 1:20,000. Figure shows a high specificity of the antibody for the modification of interest. Note that the antibody does not recognize the H3K9ac modification is present. |  |
| ELISA: Histone H3 [p Ser10] Antibody [NBP2-59167] - To determine the titer, an ELISA was performed using a serial dilution of the antibody directed against human H3S10p. The antigen used was a peptide containing the histone modification of interest. By plotting the absorbance against the antibody dilution, the titer of the antibody was estimated to be 1:35,000 |  |

Immunofluorescence: Histone H3 [p Ser10] Antibody [NBP2-59167] - Hela asynchronous cells were stained with the antibody against H3S10p and with DAPI. Cells were fixed with formaldehyde, permeabilized with sodium citrate and Triton X100 and blocked with PBS containing 2.5% BSA. (A) Cells were immunofluorescently labelled with the H3S10p antibody (diluted 1:200 and incubated for 1 hour at room temperature) followed by goat anti-rabbit antibody conjugated to DyLight 488. (B) The nuclei were stained with DAPI, which specifically labels DNA. Phosphorylation of H3 on serine 10 occurs on condensed chromosomes during mitosis. This explains the dense staining of one of the cells (indicated with an arrow).



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