

H3K27me3 polyclonal antibody - Premium

Purified rabbit polyclonal Antibody

Catalog # ADN10277

Specification

H3K27me3 polyclonal antibody - Premium - Product Information

Application	E, DB, WB, IF
Primary Accession	P68431
Reactivity	Human, Mouse, Drosophila
Host	Rabbit
Clonality	Polyclonal
Calculated MW	15404

H3K27me3 polyclonal antibody - Premium - Additional Information

Gene ID 8350;8351;8352;8353;8354;8355;8356;8357;8358;8968

Other Names

Histone H3.1, Histone H3/a, Histone H3/b, Histone H3/c, Histone H3/d, Histone H3/f, Histone H3/h, Histone H3/i, Histone H3/j, Histone H3/k, Histone H3/l, HIST1H3A, H3FA

Target/Specificity

H3K27me3

Precautions

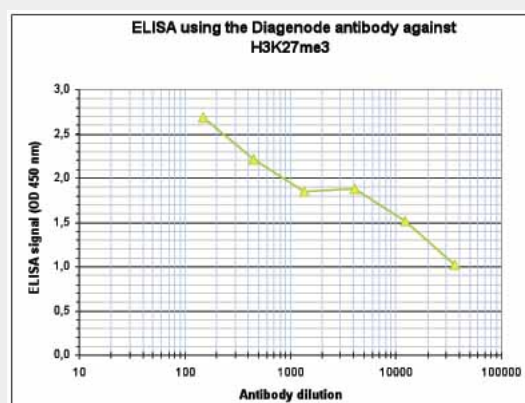
H3K27me3 polyclonal antibody - Premium is for research use only and not for use in diagnostic or therapeutic procedures.

H3K27me3 polyclonal antibody - Premium - Protein Information

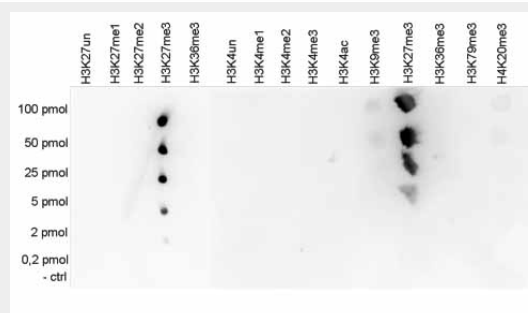
Name H3C1 ([HGNC:4766](#))

Function

Core component of nucleosome. Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machineries which require DNA as a template. Histones thereby play a central role in transcription regulation, DNA repair, DNA replication and chromosomal stability. DNA accessibility is regulated via a complex set of post-translational modifications of



To determine the titer of the antibody, an ELISA was performed using a serial dilution of the Diagenode antibody against H3K27me3 (cat. No. pAb-195-050). The antigen used was a peptide containing the histone modification of interest. By plotting the absorbance against the antibody dilution (Figure 3), the titer of the antibody was estimated to be 1:22,400.



To test the cross reactivity of the Diagenode antibody against H3K27me3 (cat. No. pAb-195-050), a Dot Blot analysis was performed with peptides containing other modifications or unmodified sequences of histone H3 and H4. One hundred to 0.2 pmol of the respective peptides were spotted on a membrane. The antibody was used at a dilution of 1:20,000. Figure 4A shows a high specificity of the antibody for the modification of interest

histones, also called histone code, and nucleosome remodeling.

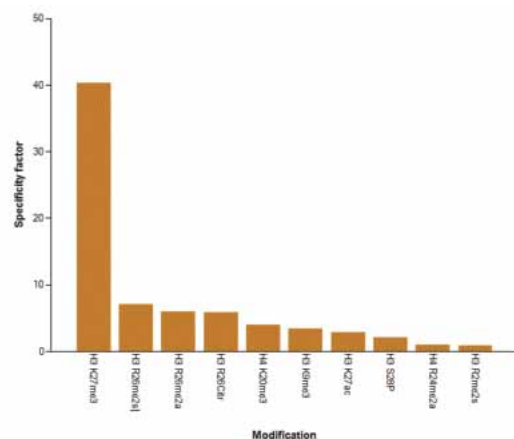
Cellular Location

Nucleus. Chromosome.

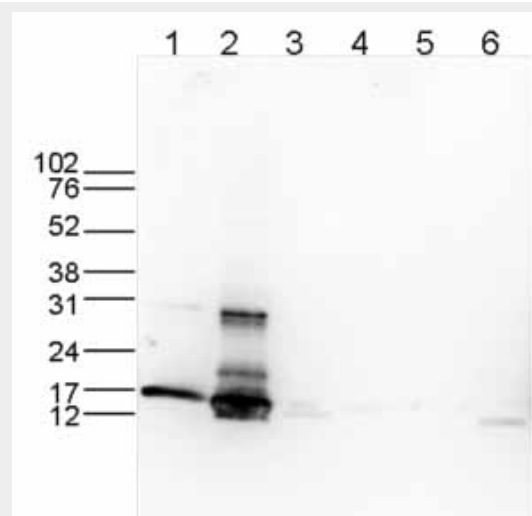
H3K27me3 polyclonal antibody - Premium - Protocols

Provided below are standard protocols that you may find useful for product applications.

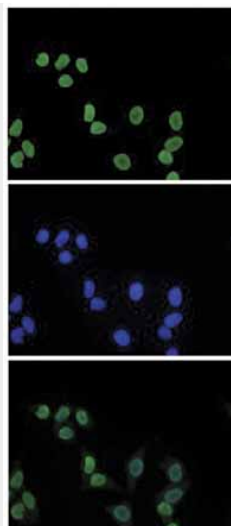
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)



The specificity of the antibody was further demonstrated by peptide array analyses on an array containing 384 peptides with different combinations of modifications from histone H3, H4, H2A and H2B. The antibody was used at a dilution of 1:20,000. Figure 4B shows the specificity factor, calculated as the ratio of the average intensity of all spots containing the mark, divided by the average intensity of all spots not containing the mark.



Western blot was performed on whole cell (25 µg, lane 1) and histone extracts (15 µg, lane 2) from HeLa cells, and on 1 µg of recombinant histone H2A, H2B, H3 and H4 (lane 3, 4, 5 and 6, respectively) using the Diagenode antibody against H3K27me3 (cat. No. pAb-195-050). The antibody was diluted 1:1,000 in TBS-Tween containing 5% skimmed milk. The position of the protein of interest is shown on the right, the marker (in kDa) is shown on the left.



Mouse NIH3T3 cells were stained with the Diagenode antibody against H3K27me3 (cat. No. pAb-195-050) and with DAPI. Cells were fixed with 4% formaldehyde for 10' and blocked with PBS/TX-100 containing 5% normal goat serum and 1% BSA. The cells were immunofluorescently labeled with the H3K27me3 antibody (top) diluted 1:500 in blocking solution followed by an anti-rabbit antibody conjugated to Alexa488. The middle panel shows staining of the nuclei with DAPI. A merge of the two stainings is shown at the bottom.