10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.622.0609

H2AK119ub polyclonal antibody - Classic

Purified rabbit polyclonal Antibody
Catalog # ADN10274

Specification

H2AK119ub polyclonal antibody - Classic - Product Information

Application	**CHIP, E, DB, WB**
Primary Accession	P68431
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**15404**

H2AK119ub polyclonal antibody - Classic - 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

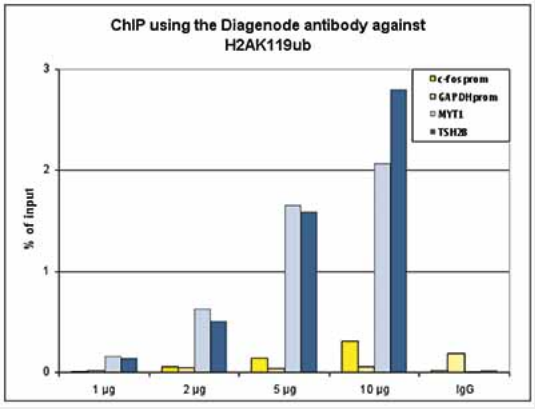
Target/Specificity
H2AK119ub

Precautions
H2AK119ub polyclonal antibody - Classic is for research use only and not for use in diagnostic or therapeutic procedures.

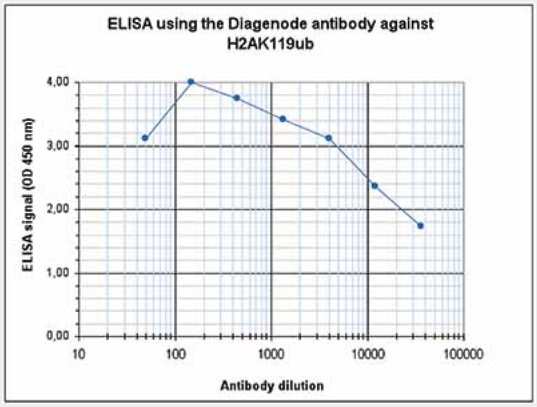
H2AK119ub polyclonal antibody - Classic - Protein Information

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 histones, also called histone code, and



ChIP assays were performed using human HeLa cells, the Diagenode antibody against H2AK119ub (cat. No. ADN10274) and optimized PCR primer pairs for qPCR. ChIP was performed with the “Auto Histone ChIP-seq” kit (cat. No. AB-Auto02-A100), using sheared chromatin from 1 million cells on the SX-8G IP-Star automated system. A titration consisting of 1, 2, 5 and 10 µg of antibody per ChIP experiment was analyzed. IgG (2 µg/IP) was used as a negative IP control. Quantitative PCR was performed with primers for the promoters of the active GAPDH and c-fos genes, used as negative controls, and for the inactive MYT1 and TSH2B genes, used as a positive controls. Figure 1 shows the recovery, expressed as a % of input (the relative amount of immunoprecipitated DNA compared to input DNA after qPCR analysis).



nucleosome remodeling.

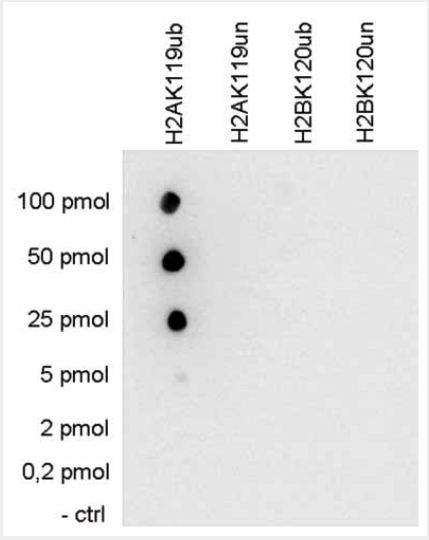
Cellular Location
Nucleus. Chromosome.

H2AK119ub polyclonal antibody - Classic - Protocols

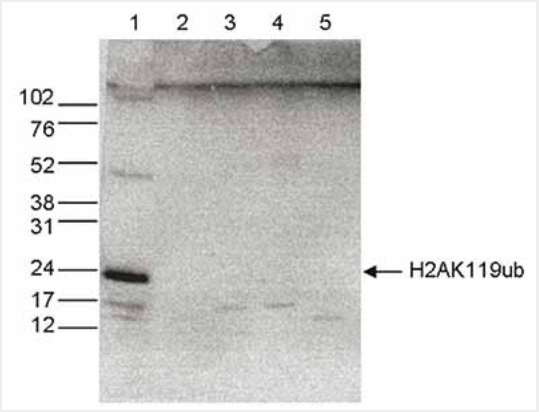
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

To determine the titer of the antibody, an ELISA was performed using a serial dilution of the Diagenode antibody against H2AK119ub (cat. No. ADN10274). The antigen used was a peptide containing the histone modification of interest. By plotting the absorbance against the antibody dilution (Figure 2), the titer of the antibody was estimated to be 1:23,000.



To test the cross reactivity of the Diagenode antibody against H2AK119ub (cat. No. ADN10274), a Dot Blot analysis was performed with peptides containing other histone ubiquitinylations and unmodified sequences. 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 3 shows a high specificity of the antibody for the modification of interest.



Western blot was performed on whole cell extracts from HeLa cells (25 µg, lane 1), and on 1 µg of recombinant histone H2A, H2B, H3 and H4 (lane 2, 3, 4 and 5, respectively)

using the Diagenode antibody against H2AK119ub (cat. No. ADN10274). The antibody was diluted 1:200 in TBS- Tween containing 5% skimmed milk. The marker (in kDa) is shown on the left.