

## H3pan polyclonal antibody

**Cat. No.** C15410059

**Type:** Polyclonal

**Isotype:** IgG2bk

**Source:** Rabbit

**Lot #:** A75-0012

**Size:** 50 µg/ 53 µl

**Concentration:** 0.95 µg/µl

**Specificity:** Human: positive

Other species: not tested

**Purity:** Affinity purified polyclonal antibody in PBS containing 0.05% azide and 0.05% ProClin 300.

**Storage:** Store at -20°C; for long storage, store at -80°C. Avoid multiple freeze-thaw cycles.

**Precautions:** This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**Description:** Polyclonal antibody raised in rabbit against histone H3, using a KLH-conjugated synthetic peptide from the C-terminus containing no modified amino acids.

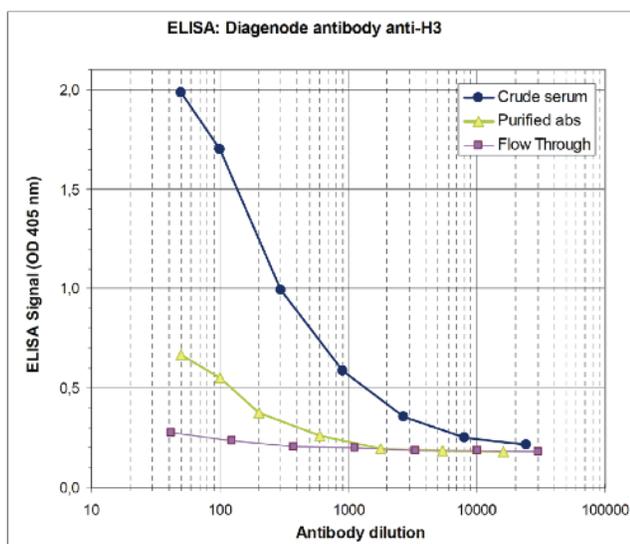
### Applications

	Suggested dilution	Results
ELISA	1:50	Fig 1
Western blotting	1:500	Fig 2

### Target description

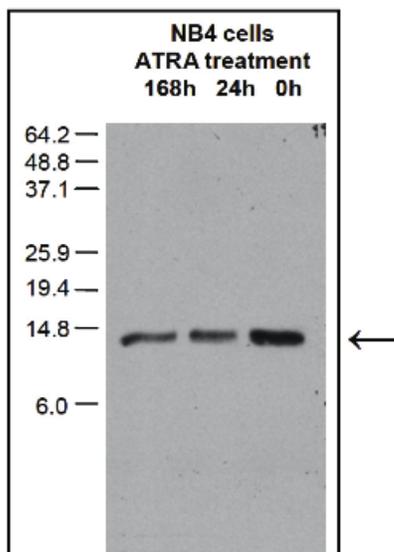
Histones are the main constituents of the protein part of chromosomes of eukaryotic cells. They are rich in the amino acids arginine and lysine and have been greatly conserved during evolution. Histones pack the DNA into tight masses of chromatin. Two core histones of each class H2A, H2B, H3 and H4 assemble and are wrapped by 146 base pairs of DNA to form one octameric nucleosome. Histone tails undergo numerous post-translational modifications, which either directly or indirectly alter chromatin structure to facilitate transcriptional activation or repression or other nuclear processes. In addition to the genetic code, combinations of the different histone modifications reveal the so-called "histone code". Histone methylation and demethylation is dynamically regulated by respectively histone methyl transferases and histone demethylases.

## Results



**Figure 1. Determination of the antibody titer**

To determine the titer of the antibody, an ELISA was performed using a serial dilution of the Diagenode antibody directed against H3pan (Cat. No. pAb-059-050), crude serum and Flow Through in antigen coated wells. By plotting the absorbance against the antibody dilution (Figure 1), the titer of the purified antibody was estimated to be 1:400.



**Figure 2. Western blot analysis using the Diagenode antibody directed against H3pan**

Histone extracts of NB4 (human promyelocytic leukemia) cells, treated with all-trans retinoic acid (ATRA) to induce cell differentiation, were analysed by Western blot using the Diagenode antibody against H3pan (Cat. No. pAb-059-050), diluted of 1:500 in TBS-Tween, containing 5% skimmed milk. Figure 2 shows the results for cells treated with ATRA for 168 h (lane 1) and 24 h (lane 2) and of untreated control cells (lane 3). A molecular weight marker (in kDa) is shown on the left, the location of the protein of interest is shown on the right.

### Diagenode sa. BELGIUM | EUROPE

LIEGE SCIENCE PARK  
Rue Bois Saint-Jean, 3  
4102 Seraing (Ougrée) - Belgium  
Tel: +32 4 364 20 50  
Fax: +32 4 364 20 51  
orders@diagenode.com  
info@diagenode.com

### Diagenode Inc. USA | NORTH AMERICA

400 Morris Avenue, Suite 101  
Denville, NJ 07834 - USA  
Tel: +1 862 209-4680  
Fax: +1 862 209-4681  
orders.na@diagenode.com  
info.na@diagenode.com

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