

## H3K18me2 polyclonal antibody - Classic

**Cat. No.** C15410291

**Type:** Polyclonal

**Source:** Rabbit

**Lot #:** 001

**Size:** 50 µg

**Concentration:** 0.79 µg/µl

**Specificity:** Human, mouse, *C. elegans*, rat, chicken, *Xenopus*, *Drosophila*, plant

**Purity:** Affinity purified

**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.

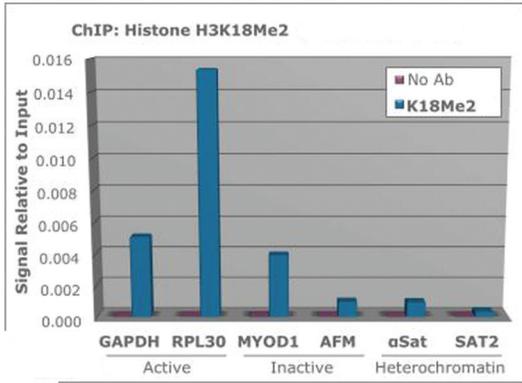
### Applications

	Suggested dilution	Results
ChIP	2-5 µg/million cells	Figure 1
IF	1:500	Figure 2
Western blot	1:500	Figure 4, 5
Immunochemistry	1:100	
Dot blot	1:1,000	Figure 3

### Target description

The di-methylated K18 on histone H3 is a seemingly transient post-translational modification. H3K18 is better known to be acetylated, and occasionally mono-methylated. Suv39h1, a well-studied histone methyltransferase seems to be responsible for the transition of acetylation and methylation at this H3 modification site. The di-methylated K18 on H3 seems to be associated with embryological development and possibly implantation.

## Results

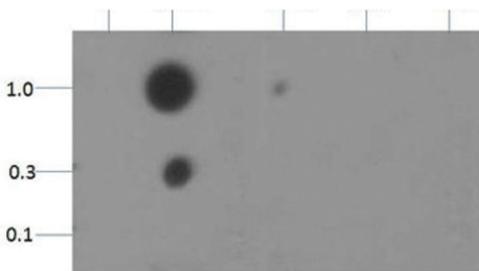
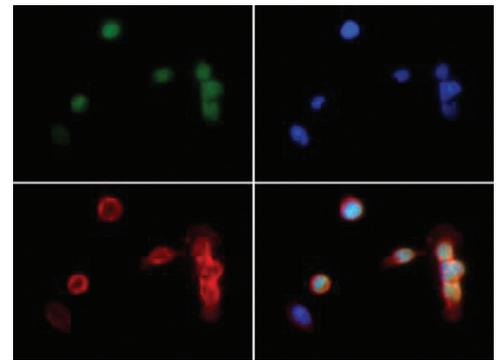


**Figure 1. ChIP**

Chromatin Immunoprecipitation of H3K18me2 antibody. Chromatin from one million formaldehyde cross-linked HeLa cells was used with 2 µg of H3K18me2 antibody and 20 µl of magnetic IgG beads per immunoprecipitation. A no antibody (No Ab) control was also used. Immunoprecipitated DNA was quantified using real-time PCR and normalized to the input chromatin.

**Figure 2. Immunofluorescence**

Immunofluorescence of H3K18me2 antibody. Tissue: HeLa cells. Fixation: 0.5% PFA. Primary antibody used at a 1:500 dilution for 1 h at RT. Secondary antibody: Dylight 488 secondary antibody at 1:10,000 for 45 min at RT. Localization: Histone H3K18me2 is nuclear and chromosomal. Staining: Histone H3K18me2 is expressed in green, nuclei and alpha-tubulin are counterstained with DAPI (blue) and Dylight 594 (red).



**Figure 3. Dot Blot**

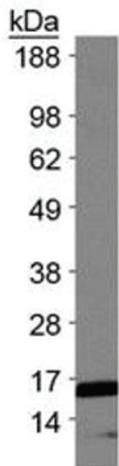
Dot Blot of H3K18me2 antibody. Lane 1: K18 unmodified. Lane 2: K18Me2. Lane 3: K18Me3. Lane 4: K18ac. Lane 5: K18Me1. Load: 0.1, 0.3, and 1 picomoles of peptide. Primary antibody used at a 1:1,000 dilution for 45 min at 4°C. Secondary antibody: Dylight™488 rabbit secondary antibody at 1:10,000 for 45 min at RT.

**Figure 4. Western Blot**

Western Blot of H3K18me2 antibody. 30 µg of *C. elegans* embryo lysate. Primary antibody used at a 1:500 dilution overnight at 4°C. Secondary antibody: IRDye800™ rabbit secondary antibody at 1:10,000 for 45 min at RT. Predicted/Observed size: ~15 kDa. Other band(s): None.

250>  
150>  
100>  
75>  
50>  
37>  
25>  
20>  
15>  
10>





**Figure 5. Western Blot**

Western Blot of H3K18me2 antibody. 30  $\mu$ g of NIH-3T3 histone extract. Primary antibody used at a 1:500 dilution overnight at 4°C. Secondary antibody: IRDye800™ rabbit secondary antibody at 1:10,000 for 45 min at RT. Predicted/Observed size: ~15 kDa. Other band(s): None.

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