

## H3K56me1 polyclonal antibody - Classic

Cat. No. C15410296

Type: Polyclonal	Specificity: Human, mouse, C. elegans, rat, chicken, Xenopus, Drosophila, plant
Size: 50 µg	Isotype: NA
Concentration: 1.1 µg/µl	Host: Rabbit
Lot No.: 002	Purity: Affinity purified
Storage buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, 30% glycerol.	Storage conditions: 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.	

Last Data Sheet Update: November 18, 2019

### Description

Polyclonal antibody raised in rabbit against Histone H3 (monomethyl Lys56), using a KLH-conjugated synthetic peptide.

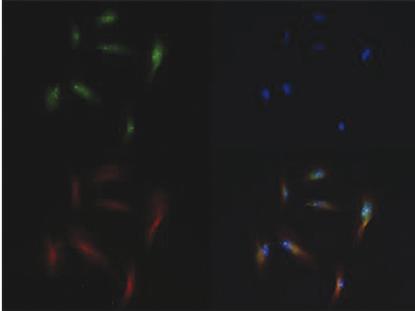
### Applications

Applications	Suggested dilution	References
ChIP	2-5 µg/million cells	
Immunofluorescence	1:20-1:100	Fig 1
Western Blotting	1 µg/mL	Fig 2
Dot Blotting	1:20-1:100	Fig 3

### Target Description

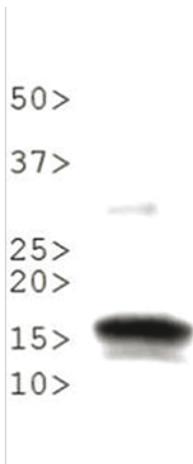
Chromatin is the arrangement of DNA and proteins in which chromosomes are formed. Correspondingly, chromatin is formed from nucleosomes, which are comprised of a set of four histone proteins (H2A, H2B, H3, H4) wrapped with DNA. Chromatin is a very dynamic structure in which numerous post-translational modifications work together to activate or repress the availability of DNA to be copied, transcribed, or repaired. These marks decide which DNA will be open and commonly active (euchromatin) or tightly wound to prevent access and activation (heterochromatin). Common histone modifications include methylation of lysine and arginine, acetylation of lysine, phosphorylation of threonine and serine, and sumoylation, biotinylation, and ubiquitylation of lysine.

**Validation Data**



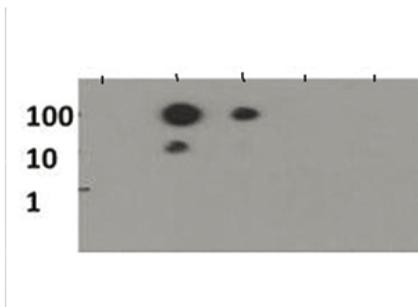
**Figure 1. Immunofluorescence**

Immunofluorescence using the H3K56me1 antibody. Tissue: HeLa cells. Fixation: 0.5% PFA. Primary antibody used at a 1:100 dilution for 1 h at RT. Secondary antibody: Dylight 488 secondary antibody at 1:10,000 for 45 min at RT. Localization: Histone H3K56me1 is nuclear and chromosomal. Staining: Histone H3K56me1 is expressed in green, nuclei and alpha-tubulin are counterstained with DAPI (blue) and Dylight 550 (red).



**Figure 2. Western Blot**

Western Blot using the H3K56me1 antibody. 30 µg C. elegans embryo lysate. Primary antibody used at 1 µg/ml overnight at 4°C. Secondary antibody: IRDye800TM rabbit secondary antibody at 1:10,000 for 45 min at RT. Predicted/Observed size: ~15 kDa. Other band(s): None.



**Figure 3. Dot Blot**

Dot Blot using the H3K56me1 antibody. Lane 1: H3K561ac. Lane 2: H3K56me1. Lane 3: H3K56me2. Lane 4: H3K56me3. Lane 5: H3K56 unmodified. Load: 1, 10, and 100 picomoles of peptide. Primary antibody used at a 1:40 dilution for 45 min at 4°C. Secondary antibody: DylightTM488 rabbit secondary antibody at 1:10,000 for 45 min at RT.