diagenode
A Hologic Company

TECHNICAL DATASHEET

H3K56me3 polyclonal antibody - Classic

Cat. No. C15410297
Type: Polyclonal
Source: Rabbit
Lot #: 001
Size: 50 µg
Concentration: 0.71 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	
IF	1:100	Figure 1, 2
Western blot	1:500 - 1:1,000	Figure 3
Dot blot	1:40	Figure 4

Target description

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. Trimethylation of lysine 56 on H3 is a novel modification, but has been reported in mouse cells at very low frequencies.

Results

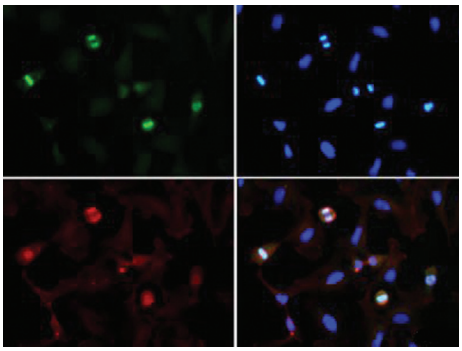

Figure 1. Immunofluorescence

Immunofluorescence using the H3K56me3 antibody. Tissue: HeLa cells during telophase. 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 H3K56me3 is nuclear and chromosomal. Staining: Histone H3K56me3 is expressed in green, nuclei and alpha-tubulin are counterstained with DAPI (blue) and Dylight 550 (red).

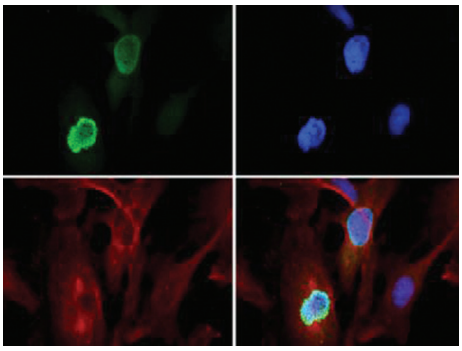

Figure 2. Immunofluorescence

Immunofluorescence using the H3K56me3 antibody. Tissue: HeLa cells during prophase. 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 H3K56me3 is nuclear and chromosomal. Staining: Histone H3K56me3 is expressed in green, nuclei and alpha-tubulin are counterstained with DAPI (blue) and Dylight 550 (red).

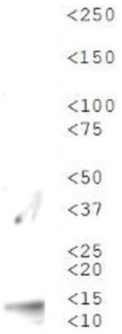

Figure 3. Western Blot

Western Blot using the H3K56me3 antibody. 30 µg C. elegans embryo lysate. Primary antibody used at 1 µg/ml 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.

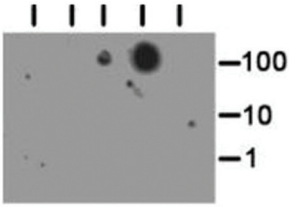

Figure 4. Dot Blot

Dot Blot using the H3K56me3 antibody. Lane 1: H3K56ac. 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: Dylight™488 rabbit secondary antibody at 1:10,000 for 45 min at RT.

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