Histone H2BK5me1 antibody (pAb)

Catalog Nos: 61439, 61440
RRID: AB_2793637
Isotype: IgG
Application(s): DB, WB
Reactivity: Human, Wide Range Predicted

Volumes: 100 µl, 10 µl
Purification: Affinity Purified
Host: Rabbit
Molecular Weight: 15 kDa

Background: Histone H2B is one of the core components of the nucleosome. The nucleosome is the smallest subunit of chromatin and consists of 147 base pairs of DNA wrapped around an octamer of core histone proteins (two each of Histone H2A, Histone H2B, Histone H3 and Histone H4). Histone H1 is a linker histone, present at the interface between the nucleosome core and DNA entry/exit points; it is responsible for establishing higher-order chromatin structure. Chromatin is subject to a variety of chemical modifications, including post-translational modifications of the histone proteins and the methylation of cytosine residues in the DNA. Reported histone modifications include acetylation, methylation, phosphorylation, ubiquitylation, glycosylation, ADP-ribosylation, carbonylation and SUMOylation; they play a major role in regulating gene expression. The methylation of histones can occur on two different residues: arginine or lysine. Changes in methylation of histone H2B may be involved in heat-shock mechanisms. Monomethylation of Lysine 5 has been reported to occur at active promoters downstream of the TSS.

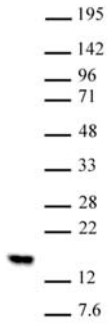
Immunogen: This antibody was raised against a synthetic peptide containing monomethyl Lysine 5 of human histone H2B.

Buffer: Purified IgG in PBS with 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.

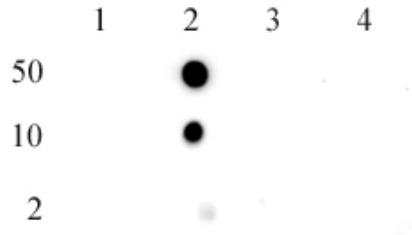
Application Notes:
Applications Validated by Active Motif:
WB: 1:500 - 1:1,000 dilution

Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.



Histone H2BK5me1 (pAb) tested by Western blot.
HeLa acid extract (20 µg) probed with Histone H2BK5me1 pAb (1:500 dilution).



Histone H2BK5me1 (pAb) tested by dot blot analysis.
Dot blot analysis was used to confirm the specificity of Histone H2BK5me1 pAb for monomethyl-Lys5 of histone H2B. Decreasing amounts of modified and unmodified peptides were spotted onto PVDF and probed with the antibody at a dilution of 1:10,000.
Lane 1: Unmodified lysine 5 peptide.
Lane 2: Peptide monomethylated at lysine 5 of H2B.
Lane 3: Peptide dimethylated at lysine 5 of